```
File 347:JAPIO Dec 1976-2007/Oct(Updated 080129)
         (c) 2008 JPO & JAPIO
File 350:Derwent WPIX 1963-2008/UD=200812
         (c) 2008 The Thomson Corporation

Set     Items   Description
S1    3138040   VEHICLE? ? OR AIRCRAFT? ? OR AIRPLANE? ? OR AIRLINER? ? OR
               PLANE OR PLANES OR JET? ? OR HELICOPTER? ? OR SPACE()SHUTTLE -
               OR CAR OR CARS OR AUTO OR AUTOMOBILE? ? OR TRUCK? ? OR BUS OR
               BUSES OR TRAIN? ? OR SHIP? ? OR BOAT? ? OR SUBMARINE? ?
S2     980003   LOADER OR READER OR RECEIVER OR PLAYER OR TRAY OR (LOADING
               OR READING OR RECEIVING OR PLAYING)()(UNIT OR DEVICE OR COMPO-
               NENT OR HARDWARE OR MECHANISM OR MODULE OR ELEMENT)
S3    1057189   MEDIA()(ELEMENT? ? OR UNIT? ?) OR CARTRIDGE? ? OR CASSETTE?
                ? OR DISC? ? OR DISK? ? OR DISKETTE? ? OR CD OR CDS OR CDROM
               OR DVD OR DVDR OR DVDRW OR DVDROM OR DVDRAM OR MINIDISK? ? OR
               MINIDISC? ? OR CDR OR CDRW OR FLOPPY OR FLOPPIES
S4     313117   (OPTIC? OR PORTABLE OR TRANSPORTABLE OR REMOVABLE)(1W)(MED-
               IA OR MEDIUM OR STORAGE) OR (PORTABLE OR TRANSPORTABLE OR REM-
               OVABLE OR FLASH OR USB OR THUMB)(1W)DRIVE? ? OR THUMBDRIVE? ?
               OR MICROVAULT OR CARD? ?
S5      9381   (UNIT OR DEVICE OR PROCESSOR OR COMPONENT OR LOGIC OR MODU-
               LE OR FUNCTIONAL()BLOCK OR ELEMENT OR CHIP OR MICROCHIP OR CI-
               RCUIT OR (15N)(DECRYPT??? OR DECIPHER???? OR UNENCRYPT??? -
               OR DESCRAMBL??? OR UNSCRAMBL?)
S6    1174441   (SEND??? OR SENT OR TRANSFER???? OR TRANSMIT???? OR TRANSMI-
               SSION? ? OR DELIVER??? OR PROVID??? OR FORWARD??? OR COMMUNI-
               CAT? OR RECEIV??? OR RECEPTION)(5N)(SIGNAL? ? OR STREAM? ? OR
               BITSTREAM? ? OR DATASTREAM? ? OR BYTESTREAM? ?)
S7    1667860   (SEND??? OR SENT OR TRANSFER???? OR TRANSMIT???? OR TRANSMI-
               SSION? ? OR DELIVER??? OR PROVID??? OR FORWARD??? OR COMMUNI-
               CAT? OR RECEIV??? OR RECEPTION)(5N)(PACKET? ? OR FRAME? ? OR -
               DATA OR INFORMATION OR CONTENT? ? OR FILE? ? OR MEDIA OR AUDIO)
S8     376190   (SEND??? OR SENT OR TRANSFER???? OR TRANSMIT???? OR TRANSMI-
               SSION? ? OR DELIVER??? OR PROVID??? OR FORWARD??? OR COMMUNI-
               CAT? OR RECEIV??? OR RECEPTION)(5N)(VIDEO? ? OR MOVIE? ? OR P-
               ROGRAM? ? OR APPLICATION? ? OR SOFTWARE OR MUSIC OR SONG? ?)
S9     117364   S2(50N)S3:S4
S10        70   S1 AND S9 AND S5 AND S6:S8
S11         1   (MOBILE()PLATFORM? ?) AND S9 AND S5 AND S6:S8
S12      3678   S5(50W)S6:S8
S13        47   S1 AND S9 AND S12
S14        47   S11 OR S13
S15        19   S14 AND PY=1963:2002
S16        24   S14 AND AY=1963:2002 AND AC=US
S17        28   S15:S16
S18     99703   S1(50N)S3:S4
S19        86   S18 AND S12
S20        54   S19 NOT S10
S21        27   S20 AND PY=1963:2002
S22        30   S20 AND AY=1963:2002 AND AC=US
S23        36   S21:S22
```

17/5,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0015830949 - Drawing available
WPI ACC NO: 2006-053643/200606
XRPX Acc No: N2006-046203
Digital versatile disk program streams passing method to video decoder, involves decrypting DVD data into packet data, and forwarding through first-in first-out element to decoder
Patent Assignee: ATI INT SRL (ATII-N)
Inventor: ELREF D; HESCH L
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 6975809 B1 20051213 US 2000712360 A 20001114 200606 B

Priority Applications (no., kind, date): US 2000712360 A 20001114

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 6975809 B1 EN 6 2

Alerting Abstract US B1
NOVELTY - The digital versatile disk (**DVD**) data is read by a central processing **unit** from a DVD drive across a peripheral **component** interconnect (PCI) **bus** . The **DVD** data is **decrypted** and converted to packet data by the CPU. The **packet** data is sent to a first-in first-out (FIFO) element through a north bridge. The **receiver packet data** is **forwarded** to the motion picture expert group (MPEG)-2 decoder.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. system for passing clear DVD program streams; and

2. set-top box.

USE - For passing clear DVD program streams from central processing unit to a MPEG-2 decoder in a computer, set-top box etc., for displaying movies from DVD.
ADVANTAGE - Reduces the number of computations. Previously encrypted transport or program streams are not sent across peripheral component interconnect (PCI) **bus** and improves efficiency.
DESCRIPTION OF DRAWINGS - The figure shows a block diagram explaining the arrangement for passing clear digital versatile disk (DVD) program stream to decoder.

Title Terms/Index Terms/Additional Words: DIGITAL; VERSATILE; DISC; PROGRAM; STREAM; PASS; METHOD; VIDEO; DECODE; DATA; PACKET; FORWARDING; THROUGH; FIRST; ELEMENT

Class Codes
International Classification (Main): H04N-005/781
US Classification, Issued: 386125000, 386111000, 386046000

File Segment: EPI;
DWPI Class: T01; W02; W03; W04
Manual Codes (EPI/S-X): T01-D01; T01-H01B6; T01-H05B4; T01-J08A; T01-J10D; T01-N01D1; W02-F05A1; W02-F07M5; W02-K03; W03-A11D; W03-A16C3; W04-C10A3; W04-P01A4

Digital versatile disk program streams passing method to video decoder, involves decrypting DVD data into packet data, and forwarding through first-in first-out element to decoder

Alerting Abstract ...NOVELTY - The digital versatile disk (**DVD**) data is read by a central processing **unit** from a DVD drive across a peripheral **component** interconnect (PCI) **bus** . The **DVD** data is **decrypted** and converted to packet data by the CPU. The **packet** data is sent to a first-in first-out (FIFO) element through a north bridge. The **receiver packet data** is **forwarded** to the motion picture expert group (MPEG)-2 decoder....computations. Previously encrypted transport or program streams are not sent across peripheral component interconnect (PCI) **bus** and

improves efficiency.

Original Publication Data by Authority

Original Abstracts:
...to an MPEG-2 decoder. In the system the CPU is connected to a first bus interface. A system memory is connected to the first bus interface via a memory bus. A second bus interface is connected to the first bus interface via a PCI (peripheral component interconnect) bus and a DVD data source is connected to the second bus interface. A packet data decoder is connected to the memory bus via a buffer. The CPU reads DVD data from the DVD data source across the PCI bus, decrypts the DVD data and creates a packet data, and sends the packet data to the buffer via the memory bus. The MPEG-2 decoder receives the packet data, via the transport bus, from the buffer. In more general terms, the system connects two existing busses in a computer of set-top...
Claims:
...a CPU (central processing unit) to a decoder, comprising: a CPU connected to a first bus interface; system memory connected to the first bus interface via a memory bus; a second bus interface connected to the first bus interface via a PCI (peripheral component interconnect) bus; a DVD data source connected to the second bus interface; and a packet data decoder connected to the memory bus via a buffer; wherein the CPU reads DVD data from the DVD data source across the PCI bus, decrypts the DVD data and creating packet data, sends the packet data to the buffer via the memory bus, and wherein the decoder receives the packet data, via the transport bus, from the buffer. Basic Derwent Week: 200606

17/5,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0015211021 - Drawing available
WPI Acc No: 2005-561046/200557
XRPX Acc No: N2005-459818
Method of selectively denying access to encoded data in military helicopter field, involves deleting encryption key transferred from magnetic card to computing device, by operator or automatically during power loss
Patent Assignee: LOCKHEED MARTIN CORP (LOCK)
Inventor: KILMER R L; LEE L A; MENIGOZ D R
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 6928551 B1 20050809 US 1999162404 P 19991029 200557 B
US 2000697304 A 20001027

Priority Applications (no., kind, date): US 1999162404 P 19991029; US 2000697304 A 20001027

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 6928551 B1 EN 8 2 Related to Provisional US 1999162404

Alerting Abstract US B1
NOVELTY - The encryption key loaded from mission planning workstation, is transmitted from magnetic card to non-volatile memory of portable computing device to execute desired process. The key is deleted from the card, after transporting the card and device to specific distance from the workstation. The encryption key is deleted from the memory by an operator or automatically in the event of power loss.
DESCRIPTION - An INDEPENDENT CLAIM is also included for system for selectively denying access to encoded data.
USE - For selectively denying access to encoded data in military helicopter field.
ADVANTAGE - Protects the access of encoded data by the unauthorized person, reliably while quickly rendering the selected data unavailable from computer memory.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the connection from mission planning workstation to the system with data access denying unit.
101 small computer system interface (SCSI) **bus**
104 extended mass storage unit (EMSU) disk drive
105 dual personal computer memory **card** international association (PCMCIA) **card** **reader** data transfer system (DTS)

Title Terms/Index Terms/Additional Words: METHOD; SELECT; ACCESS; ENCODE; DATA; MILITARY; **HELICOPTER**; FIELD; DELETE; ENCRYPTION; KEY; TRANSFER; MAGNETIC; CARD; COMPUTATION; DEVICE; OPERATE; AUTOMATIC; POWER; LOSS

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
H04L-0029/06 A I R 20060101
H04L-0009/00 A I R 20060101
H04L-0029/06 C I R 20060101
H04L-0009/00 C I R 20060101
US Classification, Issued: 713200000, 380050000, 380052000, 380273000, 380278000, 380283000, 380286000, 713185000, 713193000, 713200000, 713201000

File Segment: EPI;
DWPI Class: T01; T04; W06; W07
Manual Codes (EPI/S-X): T01-D01; T01-H01B4; T01-J07D1; T01-J12C; T04-A03A; W06-B01B; W07-X01

Method of selectively denying access to encoded data in military helicopter field, involves deleting encryption key transferred from magnetic card to computing device, by operator or...

Alerting Abstract ...USE - For selectively denying access to encoded data in military **helicopter** field...

...101 small computer system interface (SCSI) **bus**
...

...105 dual personal computer memory **card** international association (PCMCIA) **card** **reader** data transfer system (DTS)

Title Terms.../Index Terms/Additional Words: **HELICOPTER**;

Original Publication Data by Authority

Claims:
...sensitive data using said encryption key; loading the encrypted data onto the media device; loading **unencrypted** data onto a media device, wherein data necessary to enable a target portable **computing** device associated with a **vehicle** to return to a location selected as a mission **end** location remains **unencrypted**; disconnecting said media **device** from the mission planning **workstation**; connecting a media **device** to the target portable computing **device**; **powering** up the target **portable** computing **device**, thereby enabling it to execute a desired **program** or process; transferring said encryption key to volatile memory from said media device; transporting the target portable computing device **and** media devices to a **location** physically distant from the mission planning workstation; deleting said encryption key from said media device...
Basic Derwent Week: 200557

17/5,K/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0015126653 - Drawing available
WPI ACC NO: 2005-476185/200548
XRPX Acc No: N2005-387443
Terminal data loading device **installed in mobile** platform e.g. **aircraft**, receives media data **from** media element **and outputs** media signal **to control processor for distribution to network as wireline**

signal
Patent Assignee: FARLEY R J (FARL-I); RENTON J J (RENT-I)
Inventor: FARLEY R J; RENTON J J
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 20050129239 A1 20050616 US 2002428091 P 20021121 200548 B
US 2003718474 A 20031120

Priority Applications (no., kind, date): US 2002428091 P 20021121; US 2003718474 A 20031120

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 20050129239 A1 EN 18 9 Related to Provisional US 2002428091

Alerting Abstract US A1
NOVELTY - The terminal data **loading device** (100) has **media unit** like digital versatile **disk** (**DVD**) drive which reads the media data from a **media element** e.g. **DVD**, and outputs the media signal (106) to a control processor for generating an **information signal** (110). A wireline **communication** unit outputs wireline **signal** (114) in response to information signal to a network on the **aircraft**.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. method for securely processing and transferring information content for use with terminal data loading device;

2. machine readable medium storing programs for information content delivery over network on mobile platform;

3. method for on-loading content for use with terminal data loading device on mobile platform; and

4. method for off-loading content for use with terminal data loading device on mobile platform.

USE - For loading data content like in-flight entertainment (IFE) content e.g. movies for **mobile platform** e.g. **aircraft**, tour **bus**, **train**, motor home, **cruise ship**, **vehicle**, using **mobile** communication **system** e.g. global system **for mobile communication** (GSM) **system**, voice, **data**, facsimile and short message service (**SMS**) protocols.
ADVANTAGE - **Provides** permanently installed, high data capacity cryptographically secure terminal data loading (TDL) device for **receiving** transport **media element** and **delivering information content** to users in mobile **platforms**. **Enables** to **decrypt protected content** in real time, as it is read **from** removable medium so that movies and other content need to be transported to the **aircraft** unsecured.
DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the terminal data loading device.
100 TDL device
106 media signal
110 information signal
114 wireline signal

Title Terms/Index Terms/Additional Words: TERMINAL; DATA; LOAD; DEVICE; INSTALLATION; MOBILE; PLATFORM; **AIRCRAFT**; RECEIVE; MEDIUM; ELEMENT; OUTPUT; SIGNAL; CONTROL; PROCESSOR; DISTRIBUTE; NETWORK; WIRELINE

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
H04K-0001/00 A I R 20060101
H04K-0001/00 C I R 20060101
US Classification, Issued: 380270000

File Segment: EPI;
DWPI Class: T01; W02; W06; X22; X23
Manual Codes (EPI/S-X): T01-N01D1; T01-N02B1B; T01-S03; W02-C03C; W02-F07M5 ; W06-B01C7; W06-C01C9; X22-J13; X23-A13

17/5,K/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0014320067 - Drawing available
WPI ACC NO: 2004-507539/200448
XRPX Acc No: N2004-401095
Data processing system in serial communication network, has peripheral device with hardware encryption logic to encrypt input data, and interface circuit to transmit encrypted data over dedicated encrypted virtual channel
Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG)
Inventor: EVCOY D; EVCOY D R; EVCOY R D
Patent Family (9 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2004056031	A2	20040701	WO 2003IB6012	A	20031217	200448	B
AU 2003288591	A1	20040709	AU 2003288591	A	20031217	200474	E
EP 1576802	A2	20050921	EP 2003780432	A	20031217	200562	E
			WO 2003IB6012	A	20031217		
TW 200423669	A	20041101	TW 2003135835	A	20031217	200612	E
US 20060059213	A1	20060316	US 2002434796	P	20021218	200620	E
			WO 2003IB6012	A	20031217		
			US 2005539196	A	20050617		
JP 2006511123	W	20060330	WO 2003IB6012	A	20031217	200623	E
			JP 2004560124	A	20031217		
AU 2003288591	A8	20051110	AU 2003288591	A	20031217	200634	E
CN 1729644	A	20060201	CN 200380107082	A	20031217	200643	E
KR 2005092710	A	20050922	WO 2003IB6012	A	20031217	200648	E
			KR 2005711071	A	20050616		

Priority Applications (no., kind, date): US 2002434796 P 20021218; US 2005539196 A 20050617

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2004056031	A2	EN	36	10	

National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States, Original: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

AU 2003288591	A1	EN			Based on OPI patent WO 2004056031
EP 1576802	A2	EN			PCT Application WO 2003IB6012
					Based on OPI patent WO 2004056031

Regional Designated States, Original: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

TW 200423669	A	ZH			
US 20060059213	A1	EN			Related to Provisional US 2002434796
					PCT Application WO 2003IB6012
JP 2006511123	W	JA	27		PCT Application WO 2003IB6012
					Based on OPI patent WO 2004056031
AU 2003288591	A8	EN			Based on OPI patent WO 2004056031
KR 2005092710	A	KO			PCT Application WO 2003IB6012
					Based on OPI patent WO 2004056031

Alerting Abstract WO A2

NOVELTY - The peripheral **device** (16) e.g. **DVD player** connected to host device (12) through peripheral component interconnect (PCI) (14), has hardware encryption logic (34) to encrypt input data **stream**, and interface **circuit** (32) to transmit encrypted data stream over dedicated encrypted virtual channel. The host **device** has interface **circuit** (30) to receive encrypted data stream and **decryption logic** (36) to **decrypt** it.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. circuit arrangement;

2. program product for circuit arrangement definition;

3. data communication method;

4. data access provision method;

5. integrated circuit; and

6. access card.

USE - For processing data such as movie, music and television broadcast to be transmitted between host device and peripheral device such as DVD player, game system set-top box and digital satellite broadcast receiver in multi-channel serial communication network.

ADVANTAGE - The payload modifications necessary to implement dedicated encrypted virtual channel are implemented external to the circuits, thereby implementing encrypted virtual channels without any modification to the PCI-express standard. Additional channels are provided for non-encrypted data transmission and a common bus resource is shared for multiple usages, thereby reducing cost, allowing for increased flexibility in portion of data to be encrypted.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the data processing system

12 host device

14 PCI

16 peripheral device

30, 32 interface circuits

34 hardware encryption logic

36 decryption logic

Title Terms/Index Terms/Additional Words: DATA; PROCESS; SYSTEM; SERIAL; COMMUNICATE; NETWORK; PERIPHERAL; DEVICE; HARDWARE; ENCRYPTION; LOGIC; INPUT; INTERFACE; CIRCUIT; TRANSMIT; DEDICATE; VIRTUAL; CHANNEL

Class Codes

International Classification (Main): H04L-009/00, H04L-009/06, H04N-005/00
(Additional/Secondary): H04N-007/24

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G06F-0021/00	A	I	R	20060101
G06F-0003/00	A	I	F B	20060101
H04L-0009/00	A	I	F B	20060101
H04L-0009/10	A	I	F B	20060101
G06F-0021/00	C	I	R	20060101
G06F-0003/00	C	I	L B	20060101
H04L-0009/00	C	I	L B	20060101

US Classification, Issued: 708135000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-C07C4; T01-D01; T01-S03; W01-A05A

Alerting Abstract ...NOVELTY - The peripheral device (16) e.g. DVD player connected to host device (12) through peripheral component interconnect (PCI) (14), has hardware encryption logic (34) to encrypt input data stream, and interface circuit (32) to transmit encrypted data stream over dedicated encrypted virtual channel. The host device has interface circuit (30) to receive encrypted data stream, and decryption logic (36) to decrypt it. ...music and television broadcast to be transmitted between host device and peripheral device such as DVD player, game system set-top box and digital satellite broadcast receiver in multi-channel serial communication network.

...

...PCI-express standard. Additional channels are provided for non-encrypted data transmission and a common bus resource is shared for multiple usages, thereby reducing cost, allowing for increased flexibility in portion of data to be encrypted

Original Publication Data by Authority

Original Abstracts:

...along chip boundaries. In one particular application, access control may be provided for a digital data stream using a multi-chip access control

scheme that relies on one chip (148) to provide access control over a...

...multiple chips re-encrypts a digital data stream that has been decrypted on the access control chip (148) using hardware encryption logic (162) disposed on the access control chip (148), communicates the re-encrypted digital data stream over a dedicated encryption virtual channel supported by the multi-channel serial communications interface, and decrypts the re-encrypted digital data stream using hardware decryption logic (164) disposed on the other chip (150).

...

...from among multiple virtual channels supported by the communications interface (14). Encryption for the dedicated encrypted virtual channel is provided by a hardware encryption circuit (34) that is coupled to the...

...re-encrypts a digital data stream that has been decrypted on the access control chip (148) using hardware encryption logic (162) disposed on the access control chip (148), communicates the re-encrypted digital data stream over a dedicated encryption virtual channel supported by the multi-channel serial communications interface, and decrypts the re-encrypted digital data stream using hardware decryption logic (164) disposed on the other chip (150).

...

...A data processing system circuit arrangement, and method to communicate data over a multi-channel serial communications interface (14) using a dedicated encrypted virtual channel from among multiple virtual channels supported by the communications interface (14). Encryption for the dedicated encrypted virtual channel...

...stream with another chip (150) utilized to process the digital data stram once authorized to do so. A secure, multi-channel serial communications interface between the multiple chips re-encrypts a digital data stream that has been decrypted on the access control chip (148) using hardware encryption logic (162) disposed on the access control chip (148), communicates the re-encrypted digital data steam over a dedicated encryption virtual channel supported by the multi-channel serial communications interface , and decrypts the re- encrypted digital data steam using hardware decryption logic (164) disposed on the other chip (150).

Claims:
...PCI-Express-compatible interface circuit configured to support data communication over a plurality of PCI- Express virtual channels, wherein the plurality of PCI-Express virtual channels includes an unencrypted default virtual channel and a dedicated encrypted virtual channel configured to communicate encrypted data exclusively, wherein the first PCI-Express-compatible interface circuit includes a plurality of channel interconnects, each associated with a virtual channel among the plurality ...

...interconnect among the plurality of virtual channels is coupled to the hardware encryption circuit to receive the encrypted data stream, and wherein the first PCI-Express- compatible interface circuit is configured to communicate the encrypted data stream from the hardware encryption circuit over the dedicated encrypted virtual channel; a second integrated circuit...
...interconnects, each associated with a virtual channel among the plurality of virtual channels; a hardware decryption circuit coupled to a first channel interconnect among the plurality of channel interconnects for the second PCI-Express-compatible interface circuit and configured to decrypt the encrypted data stream; and a second logic block coupled to the hardware decryption circuit and configured to use the decrypted data stream; andcontrol logic coupled to at least one of the first and second PCI-Express-compatible interface circuits and configured to communicate authorization data over the default virtual channel to authorize secure communication between the first and second integrated circuits over the dedicated encrypted virtual channel.

17/5,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0014318200 - Drawing available
WPI ACC NO: 2004-505601/200448
XRPX Acc No: N2004-399350
Read circuit in personal computer, has decryption circuit for decrypting **data stored in media card, and another encryption/** decryption circuit **for encrypting data and** decrypting **commands** received from bus
Patent Assignee: LUECK A (LUEC-I); MAIN K (MAIN-I); MCWERY K R (MCWE-I); TEXAS INSTR INC (TEXI)
Inventor: LUECK A; MAIN K; MAIN K K; MCWERY K R
Patent Family (2 patents, 2 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 20040117642 A1 20040617 US 2002321315 A 20021217 200448 B
JP 2004199689 A 20040715 JP 2003418219 A 20031216 200448 E

Priority Applications (no., kind, date): US 2002321315 A 20021217

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 20040117642 A1 EN 8 3
JP 2004199689 A JA 12

Alerting Abstract US A1
NOVELTY - A **decryption** circuit is connected to the **bus** and the media card, for **decrypting** data stored on the media card. Another encryption/ **decryption** circuit is connected to the **bus** and media card, for encrypting **data** and **decrypting** commands sent on the **bus**. A driver **software** subtracts the CPU for encrypting the commands and decrypting encrypted data.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. secure transmission path;

2. method of secure transmission of data and commands; and

3. method of reading data.

USE - In personal computer for reading secure data from FLASH media cards.
ADVANTAGE - Avoids unauthorized access to decrypted information, thereby improving security of data read from media card.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of a media **card reader**.

Title Terms/Index Terms/Additional Words: READ; CIRCUIT; PERSON; COMPUTER; DECRYPTER; DATA; STORAGE; MEDIUM; CARD; ENCRYPTION; COMMAND; RECEIVE; **BUS**

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0012/14 A I F R 20060101
G06F-0021/00 A I R 20060101
G06F-0021/06 A I L R 20060101
G06F-0021/24 A I L R 20060101
G06K-0017/00 A I L R 20060101
G09C-0001/00 A I L R 20060101
H04L-0009/32 A I R 20060101
G06F-0012/14 C I F R 20060101
G06F-0021/00 C I R 20060101
G06K-0017/00 C I L R 20060101
G09C-0001/00 C I L R 20060101
H04L-0009/32 C I R 20060101
US Classification, Issued: 713193000

File Segment: EPI;

DWPI Class: T01; T04; W01
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H01C2; T04-K02; W01-A05A

Read circuit in personal computer, has decryption circuit **for** decrypting **data stored in media card, and another encryption/** decryption circuit **for encrypting data and** decrypting **commands** received **from** bus

Original Titles:
SECURE MEDIA CARD OPERATION OVER UNSECURED PCI **BUS**
...

...Secure media card operation over an unsecured PCI **bus**

Alerting Abstract ...NOVELTY - A **decryption** circuit is connected to the **bus** and the media card, for **decrypting** data stored on the media card. Another encryption/ **decryption circuit** is connected to the **bus** and media card, for encrypting **data** and **decrypting** commands sent on the **bus** . A driver **software** subtracts the CPU for encrypting the commands and decrypting encrypted data. ...DESCRIPTION OF DRAWINGS - The figure shows the block diagram of a media **card reader** .

Title Terms.../Index Terms/Additional Words: **BUS**

Original Publication Data by Authority

Original Abstracts:
...encryption function decryption circuit which remains in hardware on the peripheral side of a PCI **bus** . The command function **generator** for the media card is separated and performed in the CPU. All information flow across the PCI **bus** is encrypted with **the** media encryption function or a second encryption function such as DES so as to impede...
Claims:
...encryption function comprising: a computer having a CPU which communicates with peripheral devices via a **bus** ; first **decryption** circuit coupled to the bus and to **the** media card for **decrypting** data stored on the media card utilizing **the** first encryption function; a second encryption/ **decryption** circuit coupled to the **bus** and the media card **for encrypting data** and **decrypting commands** sent on the **bus** utilizing a second encryption **function** ; a **driver** stored within **the** computer for instructing the CPU to generate the commands, for encrypting the commands and for...

17/5,K/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0013938080 - Drawing available
WPI ACC NO: 2004-118286/200412
XRPX Acc No: N2004-094475
Data safeguarding method for communication applications, involves translating protocol specific encrypted data stream to protected content exchange encrypted data stream which is transferred, for decryption to decoding device
Patent Assignee: INTEL CORP (ITLC)
Inventor: MANGOLD R P; PFOTENHAUER J L; SHIPPY K L
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 6668324 B1 20031223 US 1999460537 A 19991213 200412 B

Priority Applications (no., kind, date): US 1999460537 A 19991213

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 6668324 B1 EN 23 13

Alerting Abstract US B1
NOVELTY - One of the protocol specific encrypted data streams is received by a **bus** (120) from an input device (110) and is translated into a protected content exchange (PCX) encrypted data stream. The PCX encrypted data stream is transferred to a decoding device (102), for decryption.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. article of manufacture including computer readable medium storing instructions to execute data safeguard process;

2. recorded medium storing instructions to execute data safeguard process;

3. data safeguarding system;

4. fixed-size data stream information synchronizing method; and

5. fixed-size data stream information synchronizing system

USE - For safeguarding transfer of data within device such as satellite receiving dish and computer or set-top box, digital versatile disk (DVD) player in terms of content encryption.

ADVANTAGE - The data within system is protected from tampering or unauthorized access by self-modification of PCX module code and self-verification of PCX codes. Thus, data is protected from unwarranted hacking or copying.

DESCRIPTION OF DRAWINGS - The figure shows the system block diagram of data safeguarding system

100 data safeguarding system
102 decoding device
104 safeguarding device
106 PCX
110 satellite, video cassette recorder (VCR)
115 CPU

Title Terms/Index Terms/Additional Words: DATA; SAFEGUARD; METHOD; COMMUNICATE; APPLY; TRANSLATION; PROTOCOL; SPECIFIC; ENCRYPTION; STREAM; PROTECT; CONTENT; EXCHANGE; TRANSFER; DECRYPTER; DECODE; DEVICE

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0011/30 A I R 20060101
G06F-0021/00 A I R 20060101
G06F-0011/30 C I R 20060101
G06F-0021/00 C I R 20060101
US Classification, Issued: 713189000, 713151000, 713165000, 713168000, 713193000

File Segment: EPI;
DWPI Class: T01; W01; W03
Manual Codes (EPI/S-X): T01-D01; T01-J08A; T01-S03; W01-A05A; W03-A16C3; W03-G05C1

Alerting Abstract ...NOVELTY - One of the protocol specific encrypted data streams is received by a bus (120) from an input device (110) and is translated into a protected content exchange (PCX...
...within device such as satellite receiving dish and computer or set-top box, digital versatile disk (DVD) player in terms of content encryption.

Original Publication Data by Authority

Original Abstracts:
A system and method of safeguarding data within a device are described. In one embodiment, at least one protocol specific encrypted data stream is received. The protocol specific...

...data stream is translated into a protected content exchange (PCX) encrypted data stream. In addition, the PCX encrypted data stream is transferred to a decoding device and the PCX encrypted data stream decrypted.

Claims:
...content exchange (PCX) encrypted data stream; transferring the PCX encrypted data stream to a decoding device; and decrypting the PCX encrypted data stream

17/5,K/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0013879633 - Drawing available
WPI ACC NO: 2004-058513/200406
XRPX Acc No: N2004-047276
Digital multimedia content playback apparatus e.g. personal computer decrypts, decodes and downsamples multimedia content stored in DVD based on author specified parameter and renders the content to user
Patent Assignee: INTEL CORP (ITLC)
Inventor: LYDECKER G H; MALISZEWSKI R L; MCPHERSON A J; MCORER J A; TRAWB S

Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 6662060 B1 20031209 US 1999420185 A 19991018 200406 B

Priority Applications (no., kind, date): US 1999420185 A 19991018

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 6662060 B1 EN 9 3

Alerting Abstract US B1
NOVELTY - An access module (24) controlling access to multimedia content from DVD (14) has decrypter (26) that decrypts multimedia content which is decoded by decoder (28). A downsampler (30) downsamples decoded content to render the content to user. The decrypting, decoding and downsampling are controlled based on author specified parameters such as filter characteristics, transfer characteristics, sampling rate, downsampling algorithm.
DESCRIPTION - An INDEPENDENT CLAIM is also included for article of manufacture comprising storage medium storing digital multimedia content playback program.
USE - For reproducing digital multimedia content from DVD using DVD-ROM drive of personal computer.
ADVANTAGE - The multimedia content is reproduced efficiently corresponding to author specified parameters.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the multimedia playback system.
10 processing system
12 DVD-ROM drive
14 DVD
22 player application
24 DVD access module
26 decrypter
28 decoder
30 downsampler
32 auto-installer script

Title Terms/Index Terms/Additional Words: DIGITAL; CONTENT; PLAYBACK; APPARATUS; PERSON; COMPUTER; DECODE; STORAGE; BASED; SPECIFIED; PARAMETER; RENDER; USER

Class Codes
International Classification (Main): H04N-007/04
US Classification, Issued: 700094000, 386095000, 386096000, 386105000

File Segment: EPI;
DWPI Class: T01; T03
Manual Codes (EPI/S-X): T01-D01; T01-H01B2; T03-B05; T03-B06C; T03-N01

Alerting Abstract ...32 auto-installer script

Original Publication Data by Authority

Claims:
...playback of digital multimedia content stored on a removable storage

medium in an author-controlled title specific manner, comprising: a player application to render the digital multimedia content for a user; an auto-installer script for automatically installing the player application; at least one access module, bundled with the auto-installer script and the player application on the removable storage medium, to control access to the digital multimedia content; wherein the at least one access module includes a decryptor to decrypt the digital multimedia content to produce decrypted content according to the author-controlled title specific parameters, a decoder to provide a user with an interface according to the author-controlled title specific parameters and decode and decompress the decrypted content to produce decoded content in response to a user input, and a downsampler to downsample...

...access module to provide a user with an interface and control at least one of decrypting, decompressing, decoding and downsampling of the digital multimedia content, in an author controlled title specific manner.

17/5,K/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0013059097 - Drawing available
WPI ACC NO: 2003-138833/ **200313**
XRPX Acc No: N2003-110162
Multimedia content distribution apparatus for CD player, cell phone, transfers contents to playback device by secure communication after mutual authentication of distribution and playback devices
Patent Assignee: GEN INSTR CORP (GENN)
Inventor: DEPIETRO M; SAFADI R
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 20020147686 A1 20021010 US 2001826820 A 20010406 200313 B

Priority Applications (no., kind, date): US 2001826820 A 20010406

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 20020147686 A1 EN 12 4

Alerting Abstract US A1
NOVELTY - A distribution device interfaced to a network, determines permission to make copies of content and registers at least one playback device to trace the content distributed to the playback device. The distribution device and the playback device are authenticated with respect to each other, and contents are transferred from the distribution device to the playback device by initiating secure communication.
DESCRIPTION - An INDEPENDENT CLAIM is included for multimedia content distribution method.
USE - For distributing multimedia contents including audio recordings, audio-visual programming, analog programming, digital broadcast or on-demand MPEG-2 programming or webcast streaming media from distribution devices such as personal versatile recorder (PVR) integrated with set-top terminal to receiver/playback devices such as PC, optical disk player e.g. CD player and digital DVD player, portable digital audio player, MP3 player, video player, cell phone, etc., in home, vehicles or office through personal area network (PAN).
ADVANTAGE - Allows consumers to transfer content among multiple devices in a transparent manner to the content type and devices. Prevents unauthorized distribution and reproduction of content transferred by the system operator over a delivery network.
DESCRIPTION OF DRAWINGS - The figure shows the flowchart explaining the retrieval of multimedia content.
Title Terms/Index Terms/Additional Words: CONTENT; DISTRIBUTE; APPARATUS; CD; PLAY; CELL; TELEPHONE; TRANSFER; PLAYBACK; DEVICE; SECURE; COMMUNICATE; AFTER; MUTUAL; AUTHENTICITY

Class Codes
International Classification (+ Attributes)

IPC + Level Value Position Status Version
G06F-0021/00 A I R 20060101
H04N-0005/00 A I R 20060101
H04N-0007/167 A I R 20060101
G06F-0021/00 C I R 20060101
H04N-0005/00 C I R 20060101
H04N-0007/167 C I R 20060101
US Classification, Issued: 705051000

File Segment: EPI;
DWPI Class: T01; T03; W01
Manual Codes (EPI/S-X): T01-D01; T03-P07; W01-A05B

Multimedia content distribution apparatus for CD player, cell phone, transfers contents to playback device by secure communication after mutual authentication of distribution...

Alerting Abstract ...from distribution devices such as personal versatile recorder (PVR) integrated with set-top terminal to **receiver**/playback devices such as PC, optical **disk player** e.g. **CD player** and digital **DVD player**, portable digital audio **player**, MP3 **player**, video **player**, cell phone, etc., in home, **vehicles** or office through personal area network (PAN)...

Original Publication Data by Authority

Original Abstracts:
...least one playback device, in accordance with rights established by the system operator or the **content** provider, where the content is **decrypted** for subsequent playback **by** the authorized **device** (s). The method **also** addresses illegal propagation of content. Basic Derwent Week: **200313**

17/5,K/11 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0012943356 - Drawing available
WPI ACC NO: 2003-020100/ **200301**
XRPX Acc No: N2003-015519
Payment card reader reads stored pseudo number and password for matching with password stored in memory
Patent Assignee: AN H G (ANHG-I); WOORI TECHNOLOGY INC (WOOR-N)
Inventor: AN H; AN H G
Patent Family (3 patents, 98 countries)
Patent Application
Number Kind Date Number Kind Date Update
WO 2002095670 A1 20021128 WO 2002KR980 A 20020523 200301 B
KR 2002090375 A 20021205 KR 200128390 A 20010523 200325 E
AU 2002303005 A1 20021203 AU 2002303005 A 20020523 200452 E

Priority Applications (no., kind, date): KR 200128390 A 20010523

Patent Details
Number Kind Lan Pg Dwg Filing Notes
WO 2002095670 A1 EN 26 4
National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
Regional Designated States, Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
AU 2002303005 A1 EN Based on OPI patent WO 2002095670

Alerting Abstract WO A1
NOVELTY - **Card** reader comprises a **reader** for the encrypted pseudo number stored on the **IC card**, a password input **unit**, a **processor** generating a one-time user number based on the password and **decrypting** the pseudo number for a display, and a **data** port **transmitting** the user number to the agency number, its terminal being a communication device for

a settlement and authentication system. The password is stored in a memory for matching with the input password.
DESCRIPTION - There are INDEPENDENT CLAIMS for:

1. A settlement system connected through a network to an agency terminal

2. A settlement method

USE - **Card reader** is for **cards** with **ICs** and interfacing with **PCs**
DESCRIPTION OF DRAWINGS - The figure shows a flow chart of a settlement method using the **card reader**.

Title Terms/Index Terms/Additional Words: PAY; CARD; READ; STORAGE; PSEUDO; NUMBER; PASSWORD; MATCH; MEMORY

Class Codes
International Classification (Main): G06K-017/00

File Segment: EPI;
DWPI Class: T01; T04; T05
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-J05A; T04-K02; T05-L01B

Payment card reader **reads stored pseudo number and password for matching with password stored in memory**

Original Titles:
CARD READER, AND SETTLEMENT AND AUTHENTICATION SYSTEM USING THE **CARD READER**
...

... **CARD READER**, AND SETTLEMENT AND AUTHENTICATION SYSTEM USING THE **CARD READER**
Alerting Abstract ...NOVELTY - **Card** reader comprises a **reader** for the encrypted pseudo number stored on the **IC card**, a password input **unit**, a **processor** generating a one-time user number based on the password and **decrypting** the pseudo number for a display, and a **data** port transmitting the user number to the agency number, its terminal being a communication device for a...
...USE - **Card reader** is for **cards** with **ICs** and interfacing with **PCs**
...

...DESCRIPTION OF DRAWINGS - The figure shows a flow chart of a settlement method using the **card reader**.

Original Publication Data by Authority

Original Abstracts:
Disclosed is a card **reader**, and a settlement/ **authentication** system and method using the same. The card **reader** reads a pseudo **number** stored in an IC **card**, decrypts it, and **generates** a one-use user number on the basis of the decrypted pseudo number and the password input through an input unit. The **card reader** is connected **to an** agency terminal (e.g., a PC), and the agency terminal provides the user number provided by the **car reader** to the **settlement / authentication** system on the network so as to request a transaction settlement or user authentication on
...
...
...

17/5,K/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0012939287 - Drawing available
WPI ACC NO: 2003-015918/ **200301**
XRPX Acc No: N2003-011853
Digital broadcast receiver **e.g. TV, set-top box, decodes scramble key using key in integrated circuit** card **and re-encodes scramble key using encoding key generated based on ID of** receiver

Patent Assignee: HITACHI LTD (HITA); KCHIYAMA T (KCHI-I); MORINO H (MORI-I); OKAYAMA M (OKAY-I); TOMOKANE T (TOMO-I)
Inventor: KCHIYAMA T; MORINO H; MORINO T; OKAYAMA M; OKAYAMA Y; TOMOKANE T
Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20020101990	A1	20020801	US 2001793114	A	20010227	200301	B
JP 2002305512	A	20021018	JP 2001916685	A	20010328	200301	E
JP 3925095	B2	20070606	JP 2001916685	A	20010328	200737	E

Priority Applications (no., kind, date): JP 2001916685 A 20010328

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020101990	A1	EN	22	13	
JP 2002305512	A	JA	13		
JP 3925095	B2	JA	16		Previously issued patent JP 2002305512

Alerting Abstract US A1

NOVELTY - A tuner (11) receives encrypted digital contents and a scramble key. A local CPU (15) decodes the scramble key using a key in an integrated circuit (IC) card (16). A key encoder (19) re-encodes the scramble key, using encoding key generated based on the ID of the viewer and an arbitrary random number which is multiplied with decoded contents and output to an external apparatus.

DESCRIPTION - An INDEPENDENT CLAIM is included for data reproducing apparatus.

USE - Digital satellite broadcast receiver such as television receiver, set-top box that receives data from satellites, and other networks such as Internet, LAN and connected to information processor such as personal computer, workstation and mobile phone, etc., and data reproducing apparatus (claimed) such as video recorder.

ADVANTAGE - As the scramble key is decoded using the key in the IC card, key management is made simpler and easier. As the scramble key is re-encoded, copyright protection of the content is enabled.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the information processing apparatus.

11 Tuner
15 CPU
16 IC card
19 Key encoder

Title Terms/Index Terms/Additional Words: DIGITAL; BROADCAST; RECEIVE; TELEVISION; SET; TOP; BOX; DECODE; SCRAMBLE; KEY; INTEGRATE; CIRCUIT; CARD; ENCODE; GENERATE; BASED; ID

Class Codes

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
H04H-0001/00	A	I L	R	20060101
H04L-0009/08	A	I F	R	20060101
H04N-0005/00	A	I	R	20060101
H04N-0007/16	A	I	R	20060101
H04N-0007/167	A	I	R	20060101
H04L-0009/08	A	I F	B	20060101
H04L-0009/14	A	I L	B	20060101
H04N-0007/16	A	I L	B	20060101
H04H-0001/00	C	I L	R	20060101
H04L-0009/08	C	I F	R	20060101
H04N-0005/00	C	I	R	20060101
H04N-0007/16	C	I	R	20060101
H04N-0007/167	C	I	R	20060101
H04L-0009/08	C	I	B	20060101
H04L-0009/14	C	I	B	20060101
H04N-0007/16	C	I	B	20060101

US Classification, Issued: 725031000, 380210000

File Segment: EPI;
DWPI Class: T01; T04; W03
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-N02A3A; T04-K02; W03-A16C3A; W03-A16C3C

Digital broadcast receiver e.g. TV, set-top box, decodes scramble key using key in integrated circuit card and re-encodes scramble key using encoding key generated based on ID of receiver

Original Publication Data by Authority

Original Abstracts:
...using the encipher key, a key storage area for storing the decipher key, and a bus I/F unit for transferring the re-enciphered scramble key and enciphered contents to an...
Claims:
...receiving data enciphered by a first encipher key; andan encipher unit connected to a **decipher** unit for **deciphering** at least one of the received data and the data **decipher** key enciphered by a second encipher key, said encipher unit enciphering the data **deciphered** or the data **decipher** key by a re-encipher key,wherein the re-enciphered data or the data decipher...
Basic Derwent Week: **200301**

17/5,K/15 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010637226 - Drawing available
WPI ACC NO: 2001-244254/ **200125**
XRPX Acc No: N2001-173887
Memory card, for storing e.g. downloaded MP3 files, encrypts session key extracted from using public key encryption and transmits it to a server
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA KK (NPCO); SANYO ELECTRIC CO LTD (SACL); DENON CO LTD (NPCO); RENESAS TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; FURUTA S; FURUTA S F L; HASEBE T; HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HATANAKA M; HATANAKA M F L; HICKI T; HICKI T S E C L; HORI Y; HORI Y S E C L; KAMADA; KAMADA F L; KAMADA J; KANAMORI M; KANAMORI M S E C L; KOTANI S; KOTANI S F L; TCNEGAWA T; TCNEGAWA T S; HATANABE M
Patent Family (10 patents, 94 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001013358	A1	20010222	WO 2000JP5339	A	20000809	200125	B
AU 200063212	A	20010313	AU 200063212	A	20000809	200134	E
EP 1209657	A1	20020529	EP 2000950052	A	20000809	200243	E
			WO 2000JP5339	A	20000809		
CN 1377497	A	20021030	CN 2000813671	A	20000809	200314	E
JP 2001517375	X	20030311	WO 2000JP5339	A	20000809	200319	E
			JP 2001517375	A	20000809		
TW 499668	A	20020821	TW 2001102962	A	20010209	200333	E
US 6999948	B1	20060214	WO 2000JP5339	A	20000809	200613	E
			US 200248482	A	20020208		
US 20060116969	A1	20060601	WO 2000JP5339	A	20000809	200637	E
			US 200248482	A	20020208		
			US 2005263017	A	20051101		
CN 1248143	C	20060329	CN 2000813671	A	20000809	200713	E
JP 4009108	B2	20071114	WO 2000JP5339	A	20000809	200778	E
			JP 2001517375	A	20000809		

Priority Applications (no., kind, date): JP 1999226406 A 19990810; JP 1999349336 A 19991208

Patent Details
Number Kind Lan Pg Dwg Filing Notes
WO 2001013358 A1 JA 127 43
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
AU 200063212 A EN Based on OPI patent WO 2001013358

```
EP 1209657          A1  EN                  PCT Application  WO 2000JP5339
                                            Based on OPI patent    WO 2001013358
Regional Designated States, Original:  AL AT BE CH CY DE DK ES FI FR GB GR
   IE IT LI LT LU LV MC MK NL PT RO SE SI
JP 2001517375       X   JA                  PCT Application  WO 2000JP5339
                                            Based on OPI patent    WO 2001013358
TW 499668           A   ZH
US 6999948          B1  EN                  PCT Application  WO 2000JP5339
                                            Based on OPI patent    WO 2001013358
US 20060116969      A1  EN                  Continuation of application  WO
   2000JP5339
                                            Continuation of application  US
   200248482
                                            Continuation of patent  US 6999948
JP 4009108          B2  JA    61            PCT Application  WO 2000JP5339
                                            Based on OPI patent    WO 2001013358
```


Alerting Abstract WO A1

NOVELTY - The memory card extracts a session key (Ks) by decoding data provided on a data bus (BS3). An encryption unit (1406) encrypts a public key KPcard of based on the session key (Ks) and sends it to a server over the data bus (BS3). Each memory (1412) stores data, such as a license key (Kc) encrypted by a unique public key Kpcard, license ID, and user ID, received from server, and stores content data (Dc]Kc) encrypted by license key (Kc) and supplied over the data bus.

USE - Memory card which can be used for licensed storage of downloaded music files received from a server, e.g. for playback in a portable telephone equipped with an MP3 player.

DESCRIPTION OF DRAWINGS - The figure is a block diagram of the memory card. (Drawing includes non-English text).

110 Memory card
Ks Session key
BS3 Data bus
1406 Encryption means
1412 Memory

Title Terms/Index Terms/Additional Words: MEMORY; CARD; STORAGE; FILE; SESSION; KEY; EXTRACT; PUBLIC; ENCRYPTION; TRANSMIT; SERVE

Class Codes
International Classification (Main): G10K-015/02, G10K-015/04
(Additional/Secondary): G01L-019/00, G06F-015/00, G06F-017/60, G06K-019/00, G06K-019/07, G10L-015/00, H04H-001/00, H04L-009/08, H04L-009/32, H04M-011/08, H04M-003/42, H04M-003/493
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0021/00 A I R 20060101
G06F-0021/00 A I F 20060101
G11B-0020/00 A N R 20060101
H04L-0029/06 A I R 20060101
H04L-0029/06 A I L 20060101
H04L-0009/00 A I F B 20060101
G06F-0021/20 A I L B 20060101
G06F-0021/24 A I L B 20060101
G06K-0019/07 A I L B 20060101
G06Q-0050/00 A I L B 20060101
G10K-0015/02 A I F B 20060101
G10L-0019/00 A I L B 20060101
H04H-0001/00 A I L B 20060101
H04L-0009/08 A I L B 20060101
H04L-0009/32 A I L B 20060101
H04M-0011/08 A I L B 20060101
H04M-0003/42 A I L B 20060101
H04M-0003/493 A I L B 20060101
G06F-0021/00 C I R 20060101
G06F-0021/00 C I F 20060101
G11B-0020/00 C N R 20060101
H04L-0029/06 C I R 20060101
H04L-0029/06 C I L 20060101
H04L-0009/00 C I L B 20060101
G06F-0021/00 C I B 20060101
G06K-0019/07 C I B 20060101

G06Q-0050/00 C I B 20060101
G10K-0015/02 C I B 20060101
G10L-0019/00 C I B 20060101
H04H-0001/00 C I B 20060101
H04L-0009/08 C I B 20060101
H04L-0009/32 C I B 20060101
H04M-0011/08 C I B 20060101
H04M-0003/42 C I B 20060101
H04M-0003/487 C I B 20060101
US Classification, Issued: 705071000, 713150000, 713171000, 705051000, 705052000, 705057000, 705058000, 705059000, 705064000, 380200000, 380201000, 380202000, 380203000, 380277000, 380282000, 705065000
File Segment: EngPI; EPI;
DWPI Class: T01; T04; W01; W02; W03; W04; P86
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H07C3A; T01-M06A1; T04-K01; W01-A05A; W01-A05B; W01-C01D3C; W01-C01P9; W01-C05B5A; W02-F10C; W02-F10N3; W03-A16C3C; W03-A16C5C; W04-G01B9

Alerting Abstract ...The memory card extracts a session key (Ks) by decoding data provided on a data **bus** (BS3). An encryption unit (1406) encrypts a public key KPcard of based on the session key (Ks) and sends it to a server over the data **bus** (BS3). Each memory (1412) stores data, such as a license key (Kc) encrypted by a...

...stores content data (Dc]Kc) encrypted by license key (Kc) and supplied over the data **bus** . USE - Memory **card** which can be used for licensed storage of downloaded music files received from a server, e.g. for playback in a portable telephone equipped with an MP3 **player** .
...

...BS3 Data **bus**

Original Publication Data by Authority

Original Abstracts:
...memory card 110 extracts a session key Ks from the data applied onto a data **bus** BS3 by carrying out a **decryption** process. An encryption processing **unit** 1406 encrypts a public encryption key KPcard(1) of memory card 110 based on session key Ks, and applies the encrypted key to a server via **data** **bus** BS3. A memory 1412 **receives** from a server **data** such as license key Kc, license ID data License-ID and user ID data User...

...storage, and receives encrypted content data [Dc]Kc encrypted with license key Kc from data **bus** BS3 for storage...

...memory card 110 extracts a session key Ks from the data applied onto a data **bus** BS3 by carrying out a **decryption** process. An encryption processing **unit** 1406 encrypts a public encryption key KPcard(1) of memory card 110 based on session key Ks, and applies the encrypted key to a server via **data** **bus** BS3. A memory 1412 **receives** from a server **data** such as license key Kc, license ID data License-ID and user ID data User...

...storage, and receives encrypted content data [Dc]Kc encrypted with license key Kc from data **bus** BS3 for storage...

...memory card 110 extracts a session key Ks from the data applied onto a data **bus** BS3 by carrying out a **decryption** process. An encryption processing **unit** 1406 encrypts a public encryption key KPcard(1) of memory card 110 based on session key Ks, and applies the encrypted key to a server via **data** **bus** BS3. A memory 1412 **receives** from a server **data** such as license key Kc, license ID data License-ID and user ID data User...

...storage, and receives encrypted content data [Dc]Kc encrypted with license key Kc from data **bus** BS3 for storage...

...memory card (110) extracts a session key (Ks) by decoding data provided on a data **bus** (BS3). Encryption means (1406) encrypts a public key KPcard (1) of the memory card (110) based on the session key (Ks) and sends it to

a server over the data **bus** (BS3). Each memory (1412) stores data, such as a license key (Kc) encrypted by a...

...content data ([Dc]Kc) encrypted by the license key (Kc) and supplied over the data **bus** (BS3...
...qui, pour extraire une clef de session (Ks), decode les donnees se presentant sur un **bus** (BS3) de donnees. Un dispositif de cryptage (1406) crypte une KPcarte (1) a clef publique...

...base de la clef de session (Ks), et l'envoie a un serveur via le **bus** (BS3) de donnees. Chaque memoire (1412) stocke non seulement les donnees recues du serveur, notamment...

...Dc]Kc) de contenu, cryptees par la clef de licence (Kc), se presentant sur le **bus** (BS3) de donnees.
Claims:
A memory card to receive **and** record encrypted content data, comprising: a first key hold **unit** (1402) storing a first private **decryption** key to **decrypt** data encrypted with a predetermined first public encryption key corresponding to said memory card, a first **decryption** processing **unit** (1404) receiving a first symmetric key updated and distributed for each **communication** of said encrypted content **data**, and encrypted with said first public encryption key to apply a **decryption** process, a second key hold **unit** (1405) to store a second public encryption key unique to each memory card, a first...

...on said first symmetric key, and providing the encrypted second public encryption key, a second **decryption** processing **unit** (1410) **receiving** a **content** key encrypted with said second public encryption key, and further encrypted with said first symmetric...

...output to an external source, a second key hold unit (1402) storing a first private **decryption** key to **decrypt** data encrypted with the first public encryption key, a first **decryption** processing **unit** (1404) receiving said first symmetric key updated and transmitted for each **communication** of said **decryption** information **data**, and encrypted with said first public encryption key to apply a decryption process, a third...

...What is claimed is: 1. A memory card to receive and record content key to **decrypt** content data comprising: a first key hold **unit** storing a first private **decryption** key to **decrypt** data encrypted with a predetermined first public encryption key corresponding to said memory card, a first **decryption** processing **unit** receiving a first symmetric key updated and distributed for each **communication** of a **content** key, and encrypted with said first public encryption key to apply a **decryption** process, a second key hold **unit** to store a second public encryption key unique to each memory card, a first encryption...
...on said first symmetric key, and providing the encrypted second public encryption key, a second **decryption** processing **unit** **receiving** said **content** key encrypted with said second public encryption key, and further encrypted with said first symmetric...

...key to decrypt data encrypted with said second public encryption key, a third decryption processing **unit** to decrypt said content key using said second private **decryption** key, based on data stored in said first storage

unit, and a control **unit** controlling operation of said memory card according to an operation mode designated from an external...

...wherein said first storage unit receives and stores said encrypted content data that can be **decrypted** based on said content key, wherein said first encryption processing unit under control of said...
Basic Derwent Week: **200125**

17/5,K/16 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0010537253 - Drawing available
WPI ACC NO: 2001-139942/ **200115**

XRPX Acc No: N2001-102048
Information exchange device for transmitting, receiving and displaying information for use in e-commerce and banking transactions, with card reading and writing facilities
Patent Assignee: CITICORP DEVCENT INC (CITI-N)
Inventor: DOCD; RIZZOCJ; WILLIAMSL
Patent Family (3 patents, 24 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 1061482	A1	20001220	EP 2000202089	A	20000616	200115	B
EP 1061482	B1	20040204	EP 2000202089	A	20000616	200410	E
DE 60008042	E	20040311	DE 60008042	A	20000616	200419	E
			EP 2000202089	A	20000616		

Priority Applications (no., kind, date): US 1999139732 P 19990618; EP 2000202089 A 20000616

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 1061482	A1	EN	23	13	
Regional Designated States, Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
EP 1061482	B1	EN			
Regional Designated States, Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
DE 60008042	E	DE			Application EP 2000202089 Based on OPI patent EP 1061482

Alerting Abstract EP A1

NOVELTY - The information exchange device includes a communications module which wirelessly transmits verification information associated with an authorized user of the information exchange device, to enable verification of whether the user of the device is an authorized user.

DESCRIPTION - The personal financial assistant includes magnetic and smart card reading and writing capability, financial software and automatic communications capabilities to interface with automated teller machines (ATMs) or other Personal Digital Assistants (PDAs). The device also includes a radio frequency transceiver, an infrared data association transceiver, data encryption standard processor and flash memory. INDEPENDENT CLAIMS are included for; an information and transaction processing system; a method for performing an electronic transaction with an information and transaction processing system.

USE - Universal card system for transmitting, receiving and displaying information for e-commerce and banking functions. For installation as part of a system to serve individuals located in e.g. kiosk, car, aircraft etc.

ADVANTAGE - Allows financial institutions to quickly and effectively tailor information to specific individuals.

DESCRIPTION OF DRAWINGS - The drawing shows a perspective view of one embodiment of the invention.

1 User interface
2 Display
3 Universal card
4 Card reader/writer
5 Docking port

Title Terms/Index Terms/Additional Words: INFORMATION; EXCHANGE; DEVICE; TRANSMIT; RECEIVE; DISPLAY; BANK; TRANSACTION; CARD; READ; WRITING; FACILITY

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G07F-0007/10 A I R 20060101
G07F-0007/10 C I R 20060101

File Segment: EPI;
DWPI Class: T01; T05; W01
Manual Codes (EPI/S-X): T01-J05A1; T01-M06A1A; T05-H02C5; T05-L02; T05-L03C1; W01-A07H2; W01-A07H3

Alerting Abstract ...For installation as part of a system to serve

individuals located in e.g. kiosk, car, aircraft etc...

...4 Card reader/writer...

Original Publication Data by Authority

Claims:
...operatively connected to said user interface for controlling the operation of said device; a memory component operatively connected to said central processing unit, for storing information and software; an encryption/decryption...

...wireless data transmission between said device and a terminal when said device is within a communications range of said terminal; and wherein said communications module wirelessly transmits verification information associated with an authorized user of said device to enable verification of whether said user of said device is said authorized user...

...operatively connected to said central processing unit (24), for storing information and software; a communications module (28,29) within the device (100; 200; 300) for enabling transmission of data (43), an...

...40) to verify whether said user of said device is said authorized user; characterised in that said terminal (40) is an automated teller machine and that said communications module (28,29) enables, without said user's prompt, said wireless data transmission between said device (100; 200; 300) and said terminal (40) when said device (100; 200; 300) is within a communications range of...
Basic Derwent Week: 200115

17/5,K/17 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010143252 - Drawing available
WPI Acc No: 2000-451896/ 200039
XRPX Acc No: N2000-336325
Prevention of unauthorized copying of audio files from master disk, involves sending encrypted data and key to player where key is decrypted using private key, for data decryption
Patent Assignee: MEMORY CORP TECHNOLOGY LTD (MEMO-N)
Inventor: OKLEY D P; TAYLOR R M
Patent Family (4 patents, 6 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2000031744	A1	20000602	WO 1999GB3877	A	19991119	200039	B
GB 2359165	A	20010815	WO 1999GB3877	A	19991119	200147	E
			GB 200111943	A	20010516		
TW 451216	A	20010821	TW 1999120479	A	19991122	200239	E
GB 2359165	B	20030423	WO 1999GB3877	A	19991119	200329	E
			GB 200111943	A	20010516		

Priority Applications (no., kind, date): GB 199825337 A 19981119

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000031744	A1	EN	41	8	
National Designated States,Original: GB JP KR SG US					
GB 2359165	A	EN			PCT Application WO 1999GB3877 Based on OPI patent WO 2000031744
TW 451216	A	ZH			
GB 2359165	B	EN			PCT Application WO 1999GB3877 Based on OPI patent WO 2000031744

Alerting Abstract WO A1
NOVELTY - Unique registration codes and private keys are provided to the data player. Data sent from a copying unit to a copy management unit is encrypted and a decryption key provided in the management unit is encrypted using the codes. The encrypted data keys are sent to a flash memory card of the player. Using the private key, the encrypted key is

decrypted to decrypt data in the card .
DESCRIPTION - The maximum preset number of registration codes of each data player are stored in the memory of the copy management unit . The decryption key provided in the management units may be the same or different from the encryption used to encrypt copied data . The private key provided for each player may be the same or different from the registration code. Storing of new codes in the memory of the management unit is withheld for a specific period.
INDEPENDENT CLAIMS are also included for the following:

1. a copy management apparatus; and

2. a data copying and playback system

USE - For preventing unauthorized copying of data such as copying of audio files from master compact disks or DVD, or the downloading of music auto portable solid state memory audio players such as portable players, home stereo units or car stereo units from the internet.
ADVANTAGE - The private key, when provided separate from a registration code, can be held in a tamper-proof location in the player without revealing to the user, hence only the code is user-accessible to maintain secrecy.
DESCRIPTION OF DRAWINGS - The figure shows a flowchart of the unauthorized copy prevention process.

Title Terms/Index Terms/Additional Words: PREVENT; COPY; AUDIO; FILE; MASTER; DISC; SEND; ENCRYPTION; DATA; KEY; PLAY; PRIVATE; DECRYPTER

Class Codes
International Classification (Main): G11C-007/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0001/00 A I R 20060101
G11C-0007/00 A I R 20060101
G11C-0007/16 A I R 20060101
H04L-0009/00 A I R 20060101
G06F-0001/00 C I R 20060101
G11C-0007/00 C I R 20060101
H04L-0009/00 C I R 20060101

File Segment: EPI;
DWPI Class: W04
Manual Codes (EPI/S-X): W04-C10A3; W04-F01L1

Prevention of unauthorized copying of audio files from master disk , involves sending encrypted data and key to player where key is decrypted using private key, for data decryption

Alerting Abstract ...NOVELTY - Unique registration codes and private keys are provided to the data player . Data sent from a copying unit to a copy management unit is encrypted and a decryption key provided in the management unit is encrypted using the codes. The encrypted data keys are sent to a flash memory card of the player . Using the private key, the encrypted key is decrypted to decrypt data in the card . ... registration codes of each data player are stored in the memory of the copy management unit . The decryption key provided in the management units may be the same or different from the encryption used to encrypt copied data . The private key provided for each player may be the same or different from the registration code. Storing of...

...copying of audio files from master compact disks or DVD, or the downloading of music auto portable solid state memory audio players such as portable players, home stereo units or car stereo units from the internet.

Original Publication Data by Authority

Original Abstracts:
...method and apparatus for controlling unauthorised copying of music onto portable solid state memory audio player devices (2), or onto removable

solid state memory **cards** (3) for use **with** such portable **player** devices. A data **copying** and playback system incorporating copy management is also claimed...

...

Basic Derwent Week: **200039** ...

17/5,K/18 (Item 18 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0009954251 - Drawing available
WPI ACC NO: 2000-256032/ **200022**
Related WPI Acc No: 2004-793473; 2004-820422
XRPX Acc No: N2000-190361
Initialization, configuration and resource management system for multipurpose integrated circuit card using personal computer
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: BARLOW D; DILLAWAY B; FOX B; LIPSCOMB T; SPIES T
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 6038551 A 20000314 US 1996647199 A 19960311 200022 B

Priority Applications (no., kind, date): US 1996647199 A 19960311

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 6038551 A EN 26 12

Alerting Abstract US A
NOVELTY - The system has an application-independent application interface (96) executed on a computer to implement services utilized by a computer-implemented application and to facilitate user access to certain resources provided by an IC card.
DESCRIPTION - The multipurpose IC **card** has several resources for different uses. A **card reader** interfaces with the IC **card** to transfer information to and from the IC **card**. A computer is coupled to the **card reader** to implement one application and to enable a user to access and manage select resources from the IC **card**. INDEPENDENT CLAIMS are also included for the following:

1. the computer-implemented application program interface;

2. the computer used in configuration and resource management of IC card;

3. the configuration system of the IC card;

4. the IC card;

5. and the cryptographic function support method.

USE - For initializing, configuring and managing various resources of multipurpose IC card e.g. smart card, PC card, used in e.g. banking, electronic commerce, travel transaction, entertainment.
ADVANTAGE - Secures management and transportation of cryptographic-related resources, e.g. keys, certificates, from one location to another. Provides uniform platform for conducting electronic transactions in different environments. Ensures use of **IC** card in encryption, decryption and authentication. Provides consistent presentation and method for managing **IC** card resources which **are** independent from the applications being supported. Allows examination of **resources** of **IC** card using icon representations of resources. Ensures that user can configure his or her IC card by adding and removing resources simply by manipulating the graphical icons. Also enables user to initialize IC card and change passcode in accessing IC card.
DESCRIPTION OF DRAWINGS - The figure is a diagrammatic illustration of a graphical screen generated according to the card manager user interface executed on the computer.
96 Application-independent application interface

Title Terms/Index Terms/Additional Words: INITIALISE; CONFIGURATION; RESOURCE; MANAGEMENT; SYSTEM; MULTIPURPOSE; INTEGRATE; CIRCUIT; CARD; PERSON; COMPUTER

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G07F-0007/10 A I R 20060101
G07F-0007/10 C I R 20060101
US Classification, Issued: 705041000, 705044000, 380024000, 380025000, 235380000

File Segment: EPI;
DWPI Class: T01; T04; T05
Manual Codes (EPI/S-X): T01-D01; T01-F06; T01-H01B3A; T01-J05A1; T04-K01; T05-L02; T05-L03

Alerting Abstract DESCRIPTION - The multipurpose IC **card** has several resources for different uses. A **card** **reader** interfaces with the IC **card** to transfer information to and from the IC **card**. A computer is coupled to the **card** **reader** to implement one application and to enable a user to access and manage select resources from the IC **card**. INDEPENDENT CLAIMS are also included for the following...

...to another. Provides uniform platform for conducting electronic transactions in different environments. Ensures use of **IC** card in encryption, decryption and authentication. Provides consistent presentation and method for managing **IC** card resources which **are** independent from the applications being supported. Allows examination of **resources** of **IC** card using icon representations of resources. Ensures that user can configure his or her IC

Original Publication Data by Authority

Original Abstracts:
...change passcodes for access to the card resources. The IC card itself provides the electronic **vehicle** for securely transporting the user's private keys and certificates without exposing them in plaintext...
Claims:
...least one computer-implemented application to access and manage a multi-purpose integrated circuit (IC) **card**, the **system** comprising: a multi-purpose integrated circuit (IC) **card** having a plurality **of** resources for different uses; a **card** **reader** which interfaces with the IC **card** to transfer information to and **from** the IC **card**; a computer coupled to the **card** **reader**, to implement at least one application **to** **enable** a user to access and manage select resources of the plurality of resources of the IC **card**; and an application-independent application interface executing **on** the computer to implement services utilized by the computer-implemented application to facilitate user access...
Basic Derwent Week: **200022**

17/5,K/21 (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0008754701 - Drawing available
WPI ACC NO: 1998-297347/ **199826**
Related WPI Acc No: 1997-132177; 1997-297677; 1999-045046; 1998-413579; 1997-332383
XRPX Acc No: N1998-232691
Data transfer method e.g. for hard disk integrated circuit of SCSI target device - involves transmitting first SCSI data transfer command to SCSI target device by reconnecting SCSI bus with SCSI target device after completion of transmission of second SCSI data transfer command
Patent Assignee: ADAPTEC INC (ADAP-N)
Inventor: KRAKIRIAN S H
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 5752083 A 19980512 US 1994205002 A 19940301 199826 B

Priority Applications (no., kind, date): US 1994205002 A 19940301; US 1995463617 A 19950605

Patent Details
Number Kind Lan Pg Dwg Filing Notes
US 5752083 A EN 13 Division of application US 1994205002

Alerting Abstract US A
The method involves determining whether a first SCSI data transfer command is an autotransfer command while transmitting the first SCSI data transfer command from a SCSI **bus** to SCSI target device. If the first SCSI data transfer command is not an autotransfer command, disconnection of SCSI target device is carried out from the SCSI **bus**, without waiting for communication from a processor of the SCSI target device. If a second SCSI data transfer command is detected to be an autotransfer command, the transmission of the second SCSI data transfer command is then carried out to the SCSI target device without waiting for the communication from the processor in the SCSI device.
A second SCSI data transfer command is transmitted to the SCSI target device from the SCSI **bus**. The SCSI target device is reconnected with the SCSI **bus** for performing transmission of the first SCSI data transfer command after completion of transmission of second SCSI data transfer command. The received first SCSI data transfer command is deciphered in the processor of the SCSI target device.
ADVANTAGE - Avoids requirement of additional interrupts for disconnection and reconnection of **bus**.

Title Terms/Index Terms/Additional Words: DATA; TRANSFER; METHOD; HARD; DISC; INTEGRATE; CIRCUIT; TARGET; DEVICE; TRANSMIT; FIRST; COMMAND; RECONNECT; **BUS**; AFTER; COMPLETE; TRANSMISSION; SECOND

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0013/12 A I R 20060101
G06F-0013/38 A I R 20060101
G06F-0003/06 A I R 20060101
G06F-0013/12 C I R 20060101
G06F-0013/38 C I R 20060101
G06F-0003/06 C I R 20060101
US Classification, Issued: 395894000, 395439000, 395739000, 360097010

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-C01A

...involves transmitting first **SCSI** data transfer command to **SCSI** target device by reconnecting **SCSI** bus with **SCSI** target device after completion of transmission of second **SCSI** data transfer command

Alerting Abstract ...is an autotransfer command while transmitting the first SCSI data transfer command from a SCSI **bus** to SCSI target device. If the first SCSI data transfer command is not an autotransfer command, disconnection of SCSI target device is carried out from the SCSI **bus**, without waiting for communication from a processor of the SCSI target device. If a second...

...second SCSI data transfer command is transmitted to the SCSI target device from the SCSI **bus**. The SCSI target device is reconnected with the SCSI **bus** for performing transmission of the first SCSI data transfer command after completion of transmission of...

...ADVANTAGE - Avoids requirement of additional interrupts for disconnection and reconnection of **bus**.

Title Terms.../Index Terms/Additional Words: **BUS**;

Original Publication Data by Authority

Original Abstracts:
...controller integrated circuit of a SCSI target-device comprises a sequencer which causes a SCSI bus to transition from a command bus phase to a data transfer bus phase during execution of an autoread or an autowrite SCSI command without waiting for a communication from a microprocessor...
Claims:
...method of transferring data to a SCSI target device comprising: (a) receiving in the SCSI target device a first SCSI data transfer command from a SCSI bus; (b) disconnecting the SCSI...

...said disconnecting a second SCSI data transfer command from the SCSI bus; (e) determining in a disk controller integrated circuit of the SCSI target device whether the second SCSI data transfer command is an autotransfer command and starting data transfer for the second SCSI data transfer command by the disk controller integrated circuit without waiting for a communication from said processor in the SCSI target device upon determining that said second SCSI data...

...command is an autotransfer command; and (f) reconnecting the SCSI target device to the SCSI bus and performing the data transfer for the first SCSI command following completion of the data transfer for the second SCSI data transfer command by the disk controller integrated circuit.
Basic Derwent Week: 199826

17/5,K/24 (Item 24 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0008129053 - Drawing available
WPI ACC NO: 1997-228840/ 199721
XRPX Acc No: N1997-189151
Vehicle mounted communications apparatus having IC card reader e.g. for communication with roadside device - has device for encrypting data for transmission to roadside device before vehicle enters communication area of device, and communication control mechanism
Patent Assignee: DENSO CORP (NPDE); NIPPONDENSO CO LTD (NPDE)
Inventor: ANDO T; MAEDA A; YOSHIDA I
Patent Family (7 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 769763	A2	19970423	EP 1996116816	A	19961018	199721	B
JP 9115019	A	19970502	JP 1995271219	A	19951019	199728	E
US 5926546	A	19990720	US 1996733912	A	19961018	199935	E
SG 71003	A1	20000321	SG 199610866	A	19961019	200022	E
JP 3156562	B2	20010416	JP 1995271219	A	19951019	200124	E
EP 769763	B1	20031210	EP 1996116816	A	19961018	200405	E
DE 69631010	E	20040122	DE 69631010	A	19961018	200415	E
			EP 1996116816	A	19961018		

Priority Applications (no., kind, date): JP 1995271219 A 19951019; EP 1996116816 A 19961018

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 769763	A2	EN	34	12	
Regional Designated States, Original: DE FR GB					
JP 9115019	A	JA	27		
SG 71003	A1	EN			
JP 3156562	B2	JA	27		Previously issued patent JP 09115019
EP 769763	B1	EN			
Regional Designated States, Original: DE FR GB					
DE 69631010	E	DE			Application EP 1996116816 Based on OPI patent EP 769763

Alerting Abstract EP A2
The apparatus includes a cryptographic mechanism (14) for encrypting transmission data to be transmitted to the roadside device (20) before the vehicle enters the communication area of the roadside device (20). A communication mechanism (18) performs the communications operations with the roadside device by transmitting the encrypted transmission data to the

roadside device.
It also receives the reception data from the roadside device when the vehicle is within the communication area of the roadside device. The cryptographic mechanism is used for decrypting the reception data after the communication mechanism completes the communication operations with the roadside device.

USE - For performing data communication using encrypted data with roadside device positioned along vehicular road.

ADVANTAGE - Efficiently encrypts data to be transmitted, performs communication in small communication area for short period of time and prevents illegal interception of data and similar. Can also provide toll charging system

Title Terms/Index Terms/Additional Words: VEHICLE; MOUNT; COMMUNICATE; APPARATUS; IC; CARD; READ; ROAD; DEVICE; DATA; TRANSMISSION; ENTER; AREA; CONTROL; MECHANISM

Class Codes
International Classification (Main): G07B-015/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version
B60R-0016/02 A N R 20060101
G07B-0015/00 A I R 20060101
B60R-0016/02 C N R 20060101
G07B-0015/00 C I R 20060101
US Classification, Issued: 380009000, 380024000

File Segment: EPI;
DWPI Class: T05; T07; W02; W06; X22
Manual Codes (EPI/S-X): T05-C03; T05-D02; T07-A03A1; W02-G05B; W06-A04B1; W06-A04B3; X22-X07

Vehicle mounted communications apparatus having IC card reader e.g. for communication with roadside device...

...has device for encrypting data for transmission to roadside device before vehicle enters communication area of device, and communication control mechanism

Original Titles:
... Vehicle-mounted communication device and vehicle monitoring system using pre-encrypted data for highly reliable communication operation...

... Vehicle-mounted communication device and vehicle monitoring system using pre-encrypted data for highly reliable communication operation...

...COMMUNICATION EQUIPMENT FOR VEHICLE AND TRAVELING VEHICLE MONITORING SYSTEM

Alerting Abstract ...14) for encrypting transmission data to be transmitted to the roadside device (20) before the vehicle enters the communication area of the roadside device (20). A communication mechanism (18) performs the...

...It also receives the reception data from the roadside device when the vehicle is within the communication area of the roadside device. The cryptographic mechanism is used for decrypting the reception data after the communication mechanism completes the communication operations with the roadside device.

Title Terms/Index Terms/Additional Words: VEHICLE;

Original Publication Data by Authority

Original Abstracts:
...is provided with transceivers (32, 34, 42, 44) in gantries (30, 40) installed along a vehicle road. This collection system uses the transceivers (32, 34, 42, 44) to perform communication with a vehicle-mounted device (10) based on the use of encrypted data. The vehicle-mounted device (10) performs the encryption and decryption of the communication data before its entry into the communication area of

the **gantries** (30, 40) and after its passage therethrough. Also, writing of the data into the IC card (2), **etc**., are also performed using encrypted data. However, an algorithm which differs from that used in...

...processing is used for encrypting the communication data. As a result, since the encryption and **decryption** of the data **is** performed only in the roadside **device** (20) side during **communication** and this encryption and **decryption** can be performed **at** a high speed, the communication time can be **shortened** to perform accurate data communications within a **limited period** of time while the **vehicle** is travelling.

...

...toll charge from an IC card is provided with transceivers in gantries installed along a **vehicle** road. This collection system uses the transceivers to **perform** communication with a **vehicle**-mounted **device** based on the **use** of encrypted data. The **vehicle**-mounted **device** performs the encryption and **decryption** of the **communication data** before its entry into **the communication** area **of** the gantries and after its passage **therethrough**. Also, writing of the **data** into the IC card, etc. are also performed using encrypted data. However, an algorithm which...

...processing is used for encrypting the communication data. As a result, since the encryption and **decryption** of the data is performed only in the **roadside** device side **during** communication and this encryption and **decryption can** be performed at a high speed, the **communication** time can be shortened to perform accurate **data** communications within a limited period of time while **the vehicle** is travelling.

Claims:

1. A **vehicle**-mounted **communication** device (10) which is installed in a **vehicle** and **which** is for performing communication operations with a roadside device (20) installed along a road when said **vehicle** is **within** a communication area of said roadside device (20), said **vehicle**-mounted **communication** device (10) comprising:</br> cryptographic means (14) for encrypting transmission data to be transmitted to said roadside device (20) before said **vehicle** enters said communication **area** of said roadside device (20); and</br> communication means (18) for performing said communication operations with...

...roadside device (20) and by receiving reception data from said roadside device (20) when said **vehicle** is within said communication area **of** said roadside device (20...

...Eine an **einem** Fahrzeug angebrachte Kommunikationsvorrichtung (10), welche in einem Fahrzeug montiert ist und welche zum Durchfuhren von...

...A **vehicle**-mounted communication device (10) which is installed in a **vehicle** and which is for performing communication operations with a roadside device (20) installed along a road when said **vehicle** is within a communication **area** of said roadside device (20), said **vehicle**-mounted communication **device** (10) comprising: drive means (12) for receiving an IC **card** (2) that stores predetermined card data; cryptographic means (14) for encrypting transmission data to be...

...said communication means (18) in said IC card via said drive means (12) based on said **decrypted data**, characterized in that said decrypting **unit** (14) further encrypts said result of **said** communication operation **before** storing said result in said **IC** card (2) by using **a** card **data** encryption **algorithm**, wherein said **communication** encryption algorithm has a higher processing speed than said card **data** encryption algorithm

Dispositif de **communication** monte sur vehicule (10) qui est installe dans un vehicule et qui est destine a...A communication device for installation in a **vehicle** to perform a communication operation with a roadside device when said communication device is within...

...device and by receiving reception data from said roadside device when said communication device is **within** said communication area of said roadside device; and cryptographic means for encrypting, using a first

encryption algorithm, said card data read through said drive means to generate said transmission data and for decrypting, using said first encryption algorithm, said reception data to obtain decrypted data, said cryptographic means further encrypting, using a second encryption algorithm different from said first encryption algorithm, a result of said communication operation, and storing said result of said communication operation encrypted using said second encryption algorithm in said IC card through said drive means. Basic Derwent Week: 199721

17/5,K/25 (Item 25 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0007081622 - Drawing available
WPI ACC NO: 1995-106500/ 199514
XRPX Acc No: N1995-084289
Secure information retrieval from mass storage media - using decryption controller on SCSI bus which retrieves information from mass storage device, decrypts it and passes it to host computer
Patent Assignee: INFOSAFE SYSTEMS INC (INFO-N)
Inventor: LIPSCOMB T H; LIPSCOMBE T H; NAGEL R; NAGEL R H
Patent Family (5 patents, 58 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5394469	A	19950228	US 1994198733	A	19940218	199514	B
WO 1995022796	A1	19950824	WO 1995US2072	A	19950209	199539	E
AU 199519236	A	19950904	AU 199519236	A	19950209	199549	E
WO 1996024893	A1	19960815	WO 1995US1531	A	19950206	199638	NCE
AU 199518392	A	19960827	AU 199518392	A	19950206	199649	NCE
			WO 1995US1531	A	19950206		

Priority Applications (no., kind, date): US 1994198733 A 19940218; WO 1995US1531 A 19950206; AU 199518392 A 19950206
Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5394469	A	EN	11	7	
WO 1995022796	A1	EN	27	7	
AU 199519236	A	EN			Based on OPI patent WO 1995022796
WO 1996024893	A1	EN	35	6	
AU 199518392	A	EN			PCT Application WO 1995US1531 Based on OPI patent WO 1996024893

National Designated States, Original: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
Regional Designated States, Original: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG
National Designated States, Original: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
Regional Designated States, Original: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE

Alerting Abstract US A
The appts. for retrieving information packets from a mass storage device, at least some of which are encrypted, has a digital bus that transmits address information, control information and data from a call initiating unit to one or more receivers. Each unit connected to the bus has an associated bus address. A host computer has a first address, a mass storage device a second and a decryption controller a third. The decryption controller has a control unit, a memory and a decryption unit.
The host computer stores the third address as the mass storage device address and sends information requests to the decryption controller in lieu of the mass storage device. The decryption controller receives the requests and sends information requests to the mass storage device, stores the packets received from the mass storage device, decrypts encrypted portions as required and transmits the information packets, in decrypted form to the host computer.
USE/ADVANTAGE - Not susceptible to attack or compromise by user. Does not require reconfiguration of PC at user side.

Title Terms/Index Terms/Additional Words: SECURE; INFORMATION; RETRIEVAL;

MASS; STORAGE; MEDIUM; DECRYPTER; CONTROL; **BUS** ; DEVICE; PASS; HOST; COMPUTER

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0001/00 A I R 20060101
G06F-0001/00 A N R 20060101
G06F-0012/14 A N R 20060101
G06F-0021/00 A I R 20060101
G06F-0001/00 C I R 20060101
G06F-0001/00 C N R 20060101
G06F-0012/14 C N R 20060101
G06F-0021/00 C I R 20060101
US Classification, Issued: 380004000, 380009000, 380023000, 380025000, 380029000, 380049000, 380050000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-C07C; T01-J05B; W01-A05A; W01-A06B1; W01-A06E1

...using **decryption** controller on **SCSI** bus **which** retrieves information from mass storage device, decrypts it and passes it to host computer

Alerting Abstract ...from a mass storage device, at least some of which are encrypted, has a digital **bus** that transmits address information, control information and data from a call initiating unit to one or more receivers. Each unit connected to the **bus** has an associated **bus** address. A host computer has a first address, a mass storage device a second and...

... The host computer stores the third address as the mass storage **device** address and sends information requests to the decryption controller in lieu of the mass storage **device** . The **decryption** controller receives the requests and sends information requests to the mass storage **device** , stores the packets received from the mass storage device, **decrypts** encrypted portions as required and transmits the information packets, in **decrypted** form, to the host computer

Title Terms.../Index Terms/Additional Words: **BUS** ;

Original Publication Data by Authority

Original Abstracts:
...personal computer or "host computer" and a Mass storage device are arranged on an SCSI **bus** . A "decryption controller", in a separate enclosure outside of the host computer, is also arranged on the SCSI **bus** . This controller is **addressable** by the host computer as if it were the mass storage device. Upon receipt of...
...A personal computer or "host computer" and a CD-ROM **reader** are arranged on an SCSI **bus** . A "decryption **controller** ", in a separate enclosure outside **of** the host computer, is also arranged on the SCSI **bus** . This controller is addressable by the host computer **as** if it were the CD-ROM **reader** . Upon receipt of an information request, **the** decryption **controller** initiates a request to the **CD-ROM reader** for the desired information, retrieves this **information** , decrypts it (if it is encrypted) and then passes it to the host computer. The decryption controller...
Claims:
...said mass storage device in encrypted form, said apparatus comprising, in combination: (a) a digital **bus** that **transmits** address information, control information and data from a call initiating unit, connected to said **bus** , to **one** or more call receiving units, connected to said **bus** , wherein **each** unit connected to said **bus** has **an** associated **bus** address; (**b**) a host computer connected to said **bus** and **having** a first address; (c) a mass storage device connected to said **bus** and **having** a second address; and (d) a **decryption** controller connected to said bus and having a third address, said decryption controller including: (1...

...said mass storage device and sends information requests via said bus to said decryption controller **in** lieu of said mass storage device; and

wherein said **decryption** controller by means of said control **unit** receives **information** requests from said host computer and executes said information requests by sending information requests via...

...storage device, storing in said memory information packets received from said mass storage device in **response** to said information requests, **decrypting** encrypted **portions** of said information packets, if **any**, by said **decryption** means and **transmitting** said **information packets**, in **decrypted** form to said host computer. Basic Derwent Week: **199514**

17/5,K/27 (Item 27 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0004679143
WPI ACC NO: 1989-039500/ **198905**
Encryption device for securing stored or transmitted data - scrambles information by key read into DC board from card reader **without being seen by host computer**
Patent Assignee: MIU AUTOMATION (MIUA-N); MIU IND LTD (MIUI-N)
Inventor: DYKE J; DYKES J
Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 4797928	A	19890110	US 19871206	A	19870107	198905	B
US RE35403	E	19961217	US 19871206	A	19870107	199705	E
			US 1990539927	A	19900618		
			US 1992837594	A	19920220		
			US 1994183771	A	19940121		

Priority Applications (no., kind, date): US 1994183771 A 19940121; US 1992837594 A 19920220; US 1990539927 A 19900618; US 19871206 A 19870107

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 4797928	A	EN	12	3	
US RE35403	E	EN	12	3	Original reissued application US 19871206
					Continuation of application US 1990539927
					Continuation of application US 1992837594
					Reissue of patent US 4797928

Alerting Abstract US A
The **device** includes a printed **circuit** board having a computer connected to a ciphering **processor**. The ciphering **processor** encrypts and **decrypts** data using the National Bureau of Standards encryption algorithm. The printed **circuit** board is connected to a host computer for **receiving** blocks of clear or encrypted **data** and commands for automatically starting the ciphering process.
The encryption PC board scrambles the information by a key. The key is read into the PC board from a **card reader** whenever data is to be encrypted or decrypted, the data decrypted or encrypted as directed, and returned to the host processor. Thus, the host computer never sees the key that was used. A secondary key is used to prevent file linking together different files in storage.
USE/ADVANTAGE - E.g. for data processing systems, telecommunication networks, magnetic tape and disk. Low cost, high performance, secure and versatile.

Title Terms/Index Terms/Additional **Words**: ENCRYPTION; DEVICE; SECURE; STORAGE; TRANSMIT; DATA; SCRAMBLE; INFORMATION; KEY; READ; DC; BOARD; CARD; HOST; COMPUTER; DATA; PROCESSOR; TELECOMMUNICATION; MAGNETIC; TAPE; DISC

Class Codes
International Classification (Main): H04L-009/00
(Additional/Secondary): H04K-001/00
US Classification, Issued: 380049000, 380004000, 380021000, 380023000,

380025000, 380029000, 380044000

File Segment: EPI;
DWPI Class: T01; T03; W01
Manual Codes (EPI/S-X): T01-H01C; T03-P01; W01-A05

...**scrambles information by key read into DC board from** card **reader without being seen by host computer**

Alerting Abstract ...The **device** includes a printed **circuit** board having a computer connected to a ciphering **processor**. The ciphering **processor** encrypts and **decrypts** data using the National Bureau of Standards encryption algorithm. The printed **circuit** board is connected to a host computer for **receiving** blocks of clear or encrypted **data** and commands for automatically starting the ciphering process...

...the information by a key. The key is read into the PC board from a **card reader** whenever data is to be encrypted or decrypted, the data decrypted or encrypted as directed...

Original Publication Data by Authority

Original Abstracts:
...for connection to the host computer. The addresses registers are connected to a memory decode, **auto**-start PROM I/**O** decoder and register select. The memory decoder is connected to the **auto**-start PROM and **the** I/O decoder is connected to the register select. A **bus** logic circuit is **connected** to the read/write controller, and outputs read/write signals to the data information transceiver and register select. The data information transceiver is connected to the **auto**-start PROM and **to** a plurality of data registers for receiving instructions from the **auto**-start PROM and **inputting** or receiving information from the data registers pursuant to instruction of the **auto**-start PROM program, **and** selection of the appropriate registers by the register select. A cipher processor, microprocessor, low address...

...program, and buffer are connected to the data registers. The microprocessor is connected to a **card reader** through a **card reader** interface, and **to** an upper address decoder and the memory, program, buffer. Upon receipt of a load key instruction...
Claims:
...a cipher **processor** connected to the register means for receiving data for encryption or **decryption** selectively...

...a key **card** interface means connected to the microprocessor, the key **card** interface means for connection to a key **card reader** for obtaining key information for the cipher processor...

17/5,K/28 (Item 28 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0003063036
WPI ACC NO: 1984-153978/ **198425**
Auto-teller using encryption module for user card data - has removable loader containing algorithm performance instructions on ROM for generating master key for encryption circuit
Patent Assignee: BURROUGHS CORP (BURS)
Inventor: ABRAHAM P C T; FERNANDES A M C
Patent Family (5 patents, 8 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 111381	A	19840620	EP 1983304907	A	19830825	198425	B
GB 2131586	A	19840620	GB 198234568	A	19821203	198425	E
GB 2131586	B	19851120	GB 198234568	A	19821203	198547	E
EP 111381	B	19881102	EP 1983304907	A	19830825	198844	E
DE 3378383	G	19881208				198850	E

Priority Applications (no., kind, date): GB 198234568 A 19821203

Patent Details
Number Kind Lan Pg Dwg Filing Notes
EP 111381 A EN 80 9
Regional Designated States, Original: BE CH DE FR LI NL SE
EP 111381 B EN
Regional Designated States, Original: BE CH DE FR LI NL SE

Alerting Abstract EP A
The autoteller system encryption module is coupled to receive an input word and current key word. The module responds to the latter to provide an output word. A removable master key loader provides instructions for the operation of an algorithm to generate a master key word. A port on the encryption module receives the master key loader and also reads the instant instructions from it.
A card reader reads the data from the user card. A data link receives a sub-key word from a remote location host system. The teller system generates a session key word by coupling the sub-key word as an input word in the encryption module. The system has the keys stored in a battery maintained RAM which is volatile if the encryption module is removed.

Title Terms/Index Terms/Additional Words: AUTO; TELLER; ENCRYPTION; MODULE; USER; CARD; DATA; REMOVE; LOAD; CONTAIN; ALGORITHM; PERFORMANCE; INSTRUCTION; ROM; GENERATE; MASTER; KEY; CIRCUIT
Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06Q-0040/00 A I L R 20060101
G07D-0009/00 A I F R 20060101
G07F-0007/10 A I R 20060101
G06Q-0040/00 C I L R 20060101
G07D-0009/00 C I F R 20060101
G07F-0007/10 C I R 20060101

File Segment: EPI;
DWPI Class: T05
Manual Codes (EPI/S-X): T05-H02; T05-K02; T05-L

Auto-teller using encryption module for user card data...

Alerting Abstract ...A card reader reads the data from the user card. A data link receives a sub-key word from a remote location host system. The...

Title Terms/Index Terms/Additional Words: AUTO;

Original Publication Data by Authority

Original Abstracts:
...improvements in and relating to autoteller systems. An autoteller system 10 comprises an encryption module 30 for encrypting and decrypting data on user cards and for encrypting and decrypting data communicated between it 10 and a remote host 22. The system is characterised by a key loader 58 containing algorithm performance instructions on a ROM 88 removably connectable to the encryption module...
Claims:
...A card reader reads the data from the user card. A data link receives a sub-key word from a remote location host system. The...

...A system including an autoteller (10) for dispensing money on presentation of a valid card; said autoteller including a card reader (24) for reading data from a card; a data link (20) for communicating with a remote processor (22); an encryption module (30...

...a master key word, a port on said encryption module for receiving said master key loader and for reading said instructions therefrom, a card reader for reading data from said card, and a data link operable to receive a remotely provided sub key word, where said...

...word in said encryption module, said system being coupled to receive said data on said card from said reader and being operable thereafter

to coupled said data from said **card** to said encryption module as said input word to said encryption module for encryption in...

...a selected one out of a plurality of manners of encryption; a removable master key **loader** for providing instructions for the performance of an algorithm for the generation of a master key word, a port on said encryption module for receiving said master key **loader** and for reading said instructions therefrom, a **card reader** for reading data from said **card**, and a data link operable to receive a remotely provided sub key word, where said...

...word in said encryption module, said system being coupled to receive said data on said **card** from said **reader** and being operable thereafter to coupled said data from said **card** to said encryption module as said input word to said encryption module for encryption in...
...

23/5,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2008 JPO & JAPIO. All rts. reserv.

05500219 **Image available**
COMMUNICATION EQUIPMENT FOR VEHICLE AND TRAVELING VEHICLE MONITORING SYSTEM

PUB. NO.: 09-115019 [JP 9115019 A]
PUBLISHED: May 02, 1997 (**19970502**)
INVENTOR(s): MAEDA ASAKO
ANDO TOSHIHIDE
YOSHIDA ICHIRO
APPLICANT(s): DENSO CORP [000426] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-271219 [JP 95271219]
FILED: October 19, 1995 (19951019)
INTL. CLASS: [6] G07B-015/00
JAPIO CLASS: 29.4 (PRECISION INSTRUMENTS -- Business Machines)
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessers)

ABSTRACT

PROBLEM TO BE SOLVED: To shorten the communication time by efficiently ciphering data at communication equipment for vehicle for exchanging ciphered data with on-road equipment.

SOLUTION: In this system in which communication equipment 32, 42... are provided at guntries 30 and 40 installed on a **vehicle** traveling road, communication using the ciphered data is performed with on-vehicle equipment 10 through the communication equipment 32, 42... and a passage fee is automatically collected from an **IC card** 2, an on-**vehicle** equipment 10 ciphers and **deciphers** the **communication** data before entering the guntries 30 and 40 and after passage. Besides, the ciphered data are also used for writing data into the IC **card** 2 but a high-speed processable algorithm different from the IC **card** 2 is used for ciphering the **communication data**. As a result, since it is enough to cipher/decipher the data only on the side of on-road equipment 20 at the time of communication and this operation can be performed at a high speed, the communication time can be shortened and data communication can exactly be executed within limited time during traveling.

23/5,K/7 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0015870409 - Drawing available
WPI ACC NO: 2006-402085/200641
Related WPI Acc No: 2004-460159; 2007-089100
XRPX Acc No: N2006-335170
Cryptographic serial advanced technology attachment device for internal attachment of hard disk drive in personal computer, has high-speed cryptographic processing engine connected to main controller
Patent Assignee: CHIU C (CHIU-I); ENOVA TECHNOLOGY CORP (ENOV-N); WANN S (WANN-I); ENOVA SCI & TECHNOLOGY CO LTD (ENOV-N)
Inventor: CHIU C; WANN S; CHIU CY; QIU Z; WAN S
Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20060117189	A1	20060601	US 2000704769	A	20001103	200641	B
			US 2003635833	A	20030806		
			US 2005282175	A	20051118		
JP 2007143149	A	20070607	JP 2006306383	A	20061113	200738	E
CN 101008931	A	20070801	CN 200610162479	A	20061117	200808	E

Priority Applications (no., kind, date): US 2000704769 A 20001103; US 2003635833 A 20030806; US 2005282175 A 20051118

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes

US 20060117189	A1	EN	22	12	C-I-P of application	US 2000704769
					C-I-P of application	US 2003635833
JP 2007143149	A	JA	21			

Alerting Abstract US A1

NOVELTY - The cryptographic serial advanced technology attachment (SATA) device comprises main controller, SATA device and host protocol stacks. A cryptographic engine is connected between main controller and SATA device and host protocol stacks, for high-speed cryptographic processing. The engine performs encryption/decryption on predefined frame information structures (FISs) payload exchanged between SATA host adapter and SATA device controller.

DESCRIPTION - An INDEPENDENT CLAIM is also included for cryptographic method.

USE - For internal attachment of storage devices e.g. internal/external hard disk drive (HDD), compact disk (CD), DVD, and Flash memory enclosures, serial ATA-to-integrated drive electronics (IDE)/IDE-to-serial ATA module, SATA-to-universal serial bus (USB)/USB-to-SATA module in e.g. personal computer (PC).

ADVANTAGE - The cryptographic SATA device encrypts/ decrypts selected data streams received at each input/output side of host/ device at high speed and distinguishes a received FIS with a data payload that requires cryptographic processing from all others that do not require cryptographic processing, efficiently and quickly.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the cryptographic SATA device.

Title Terms/Index Terms/Additional Words: CRYPTOGRAPHIC; SERIAL; ADVANCE; TECHNOLOGY; ATTACH; DEVICE; INTERNAL; HARD; DISC; DRIVE; PERSON; COMPUTER ; HIGH; SPEED; PROCESS; ENGINE; CONNECT; MAIN; CONTROL

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0012/14 A I F B 20060101
H04L-0009/10 A I F B 20060101
G06F-0013/38 A I F 20060101
G06F-0013/42 A I L 20060101
H04L-0029/08 A I L 20060101
G06F-0012/14 C I L B 20060101
H04L-0009/10 C I F B 20060101
G06F-0013/38 C I 20060101
G06F-0013/42 C I 20060101
H04L-0029/08 C I 20060101
US Classification, Issued: 713189000

File Segment: EPI;
DWPI Class: T01; T03
Manual Codes (EPI/S-X): T01-C01; T01-C07C4; T01-D01; T01-H01B; T01-H05B2; T03-A08A1C; T03-P01F; T03-P07A

Alerting Abstract ...USE - For internal attachment of storage devices e.g. internal/external hard disk drive (HDD), compact disk (CD), DVD , and Flash memory enclosures, serial ATA-to-integrated drive electronics (IDE)/IDE-to-serial ATA module, SATA-to-universal serial bus (USB)/USB-to-SATA module in e.g. personal computer (PC...

...ADVANTAGE - The cryptographic SATA device encrypts/ decrypts selected data streams received at each input/output side of host/ device at high speed and distinguishes a received FIS with a data payload that requires cryptographic processing from all others that do not require cryptographic processing, efficiently...

Original Publication Data by Authority

Claims:

An encrypting/ decrypting device is comprised of a main controller, at least one protocol stack which is suitable for difference of the signal transmission and at least one encryptor/decryptor which is coupled between the main controller and protocol...

Basic Derwent Week: 200641

23/5,K/8 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0015737249 - Drawing available
WPI ACC NO: 2006-298767/200631
Related WPI Acc No: 2004-225351
XRPX Acc No: N2006-253704
Digital right management card in personal computer, has interface sending digital document portion to digital appliance in presentation equivalent format, such that digital appliance access document only in presentation equivalent format
Patent Assignee: ELAZAR G (ELAZ-I); HARKABI D (HARK-I); WEINGARTEN N (WEIN-I); SANDISK CORP (SAND-N)
Inventor: ELAZAR G; HARKABI D; WEINGARTEN N
Patent Family (2 patents, 111 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20060080535	A1	20060413	US 2002227155	A	20020823	200631 B
			US 200567298	A	20050225	
WO 2006110213	A2	20061019	WO 2006US5687	A	20060215	200669 E

Priority Applications (no., kind, date): US 2002227155 A 20020823; US 200567298 A 20050225
Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20060080535	A1	EN	13	6	C-I-P of application US 2002227155
WO 2006110213	A2	EN			

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Alerting Abstract US A1

NOVELTY - The device has a formatter for rendering stored form of digital document into a presentation equivalent format for a digital appliance. An interface is provided for sending a portion of the digital document to the digital appliance in the presentation equivalent format, such that the digital appliance access the digital document only in the presentation equivalent format.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. method of supplying digital document to digital appliance; and

2. system for digital content management.

USE - E.g. flash memory **card** such as **compact flash**, **multi-media card**, **secured digital**, **minisecured digital**, **transflash**, **memory stick**. **flash drives** e.g. universal serial bus (USB) flash drive used in digital appliance such as personal computer (PC), tablet computer, personal digital assistant (PDA), cell phone and handheld device.

ADVANTAGE - Since the digital appliance cannot access the stored information content of the digital document in the device, the security of the digital document is increased.

DESCRIPTION OF DRAWINGS - The figure shows a schematic block diagram of the digital right management device.

Title Terms/Index Terms/Additional Words: DIGITAL; RIGHT; MANAGEMENT; CARD; PERSON; COMPUTER; INTERFACE; SEND; DOCUMENT; PORTION; APPLIANCE; PRESENT; EQUIVALENT; FORMAT; ACCESS

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0021/00 A I F B 20060101
G06F-0021/00 A I R 20060101

G06F-0021/24 A I F R 20060101
G06Q-0050/00 A I L R 20060101
H04L-0009/00 A I F B 20060101
H04L-0009/10 A I L R 20060101
H04L-0009/16 A I L R 20060101
H04L-0009/32 A I L R 20060101
G06F-0021/00 C I F B 20060101
G06F-0021/00 C I R 20060101
G06Q-0050/00 C I L R 20060101
H04L-0009/00 C I L B 20060101
H04L-0009/10 C I L R 20060101
H04L-0009/14 C I L R 20060101
H04L-0009/32 C I L R 20060101
US Classification, Issued: 713176000

File Segment: EPI;
DWPI Class: T01; T04
Manual Codes (EPI/S-X): T01-F05E; T01-H01B3D; T01-H01C2; T01-J11D; T01-J11E ; T04-K02A; T04-K03D

Alerting Abstract ...USE - E.g. flash memory **card** such as compact flash , multi- **media** card , secured digital , mini secured digital **transflash** , memory stick , **flash drives e.g.** universal serial bus (USB) flash drive used in digital appliance such as personal computer (PC...

Original Publication Data by Authority

Original Abstracts:
...document file can be resident already on a device, and/or be transferred into a **device** that is connected to the digital appliance. The **device** (hereafter a DRM **device**) can internally store the digital document or part of the document. The DRM **device** may **decrypt** the digital document when requested to do so. The **device** may further format the content for usage, for example, convert text into its graphic bitmap representation. Device formatting can include **sending** plain text **data** to the digital appliance. The device may further process degradation to the resulted file, for...

...document file can be resident already on a device, and/or be transferred into a **device** that is connected to the digital appliance. The **device** (hereafter a DRM **device**) can internally store the digital document or part of the document. The DRM **device** may **decrypt** the digital document when requested to do so. The **device** may further format the content for usage, for example, convert text into its graphic bitmap representation. Device formatting can include **sending** plain text **data** to the digital appliance. The device may further process degradation to the resulted file, for...
Basic Derwent Week: 200631

23/5,K/9 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0015065504
WPI ACC NO: 2005-414736/200542
XRPX Acc No: N2005-336139
An apparatus and a method for secure communications for network computers
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: BREWER J A; GUPTA S
Patent Family (2 patents, 2 countries)
Patent Application
Number Kind Date Number Kind Date Update
TW 589521 A 20040601 TW 2001107299 A 20010328 200542 B
US 6922785 B1 20050726 US 2000569499 A 20000511 200549 E

Priority Applications (no., kind, date): US 2000569499 A 20000511

Patent Details
Number Kind Lan Pg Dwg Filing Notes

TW 589521 A ZH 0
TW A
NOVELTY - An apparatus and a method in a distributed data processing system are provided for encrypting all data being sent from a computer to a network by using encryption hardware built on a network interface card. A block of data is retrieved from segmentation logic on a network interface card, encrypted using encryption hardware, and then inserted into a data packet. A flag is set in a packet header to indicated the type of encryption before the packet is transmitted to the network. When the packet is received at a data processing system equipped in a similar manner as the sending data processing system, the decryption algorithm indicated by the flag in the packet header is applied to the data using decryption hardware built on the network interface **card**. The **decrypted data** is then sent to re-assembly **logic** for rebuilding the original message from the **transmitted** packets. Once the message is rebuilt, it is sent to a computer memory via a system **bus** for further processing. If the **receiving data** processing system is not equipped with a similar network interface **card**, it is still possible to decrypt the message if suitable software is provided.

Title Terms/Index Terms/Additional Words: APPARATUS; METHOD; SECURE; COMMUNICATE; NETWORK; COMPUTER

Class Codes
International Classification (Main): G06F-001/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version
H04L-0029/06 A I R 20060101
H04L-0009/06 A I R 20060101
H04L-0009/30 A I R 20060101
H04L-0029/06 C I R 20060101
H04L-0009/06 C I R 20060101
H04L-0009/28 C I R 20060101
US Classification, Issued: 713201000, 713176000, 713202000, 380028000, 380021000, 380047000, 340825070, 340824000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-D01; W01-A05A

...packet header is applied to the data using decryption hardware built on the network interface **card**. The **decrypted data** is then sent to re-assembly **logic** for rebuilding the original message from the **transmitted** packets. Once the message is rebuilt, it is sent to a computer memory via a system **bus** for further processing. If the **receiving data** processing system is not equipped with a similar network interface **card**, it is still possible to decrypt the message if suitable software is provided.

Original Publication Data by Authority

Original Abstracts:
...type. If the data packet is received by a system equipped with similar network interface **card**, decryption algorithm indicated by the flag is applied to the data using decryption hardware on...

...is sent to a computer memory via a system bus for further processing. If the **data** packet is received by a system not equipped with the network interface card, suitable **software** is **provided** to **decrypt** the **data packet**. > Basic Derwent Week: 200542

23/5,K/12 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0013987032 - Drawing available
WPI ACC NO: 2004-168079/200416
XRPX Acc No: N2004-134053
Vehicle e.g. **car-onboard dedicated short-range communication** apparatus **for**

electronic toll collection system, has command control unit to manage command according to result of judgment by command judgment unit

Patent Assignee: MATSUSHITA ELECTRONIC CORP (AMEPI-CA (MATU); MITSUBISHI DENKI KK (MITQ); MIYAMOTO T (MIYA-I); RENESAS TECHNOLOGY CORP (RENE-N); RUNESASU TECHNOLOGY KK (RUNE-N)
Inventor: MIYAMOTO T

Patent Family (5 patents, 4 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20040019412	A1	20040129	US 2002330091	A	20021230	200416	B
DE 10315782	A1	20040226	DE 10315782	A	20030407	200416	E
JP 2004062468	A	20040226	JP 2002218975	A	20020726	200416	E
CN 1471013	A	20040128	CN 2003110210	A	20030404	200426	E
US 6920379	B2	20050719	US 2002330091	A	20021230	200547	E

Priority Applications (no., kind, date): JP 2002218975 A 20020726; US 2002330091 A 20021230

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040019412	A1	EN	25	15	
JP 2004062468	A	JA	23		

Alerting Abstract US A1

NOVELTY - The apparatus has a command judgment unit of an electronic toll collection-security application module (ETC-SAM) (24) to judge a type command included in a communication signal transmitted between a host(23) and an integrated circuit (IC) card (31) with user information. A command control unit of the ETC-SAM controls the command according to a result of judgment by the unit.

USE - Used for mounting on a vehicle e.g. car for control of an electronic toll collection system.

ADVANTAGE - The command control unit of the electronic toll collection-security application module (ETC-SAM) controls the command according to the result of the judgement unit, thereby simplifying the communication procedure and reducing the communication time, while realizing the support for multiple applications.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of a vehicle-onboard dedicated short range communication (DSRC) apparatus.

23 HOST
24 Electronic toll communication-security application module
25 Human-machine interface
27 Integrated circuit slot
31 Integrated circuit card

Title Terms/Index Terms/Additional Words: VEHICLE; CAR; DEDICATE; SHORT; RANGE; COMMUNICATE; APPARATUS; ELECTRONIC; TOLL; COLLECT; SYSTEM; COMMAND; CONTROL; UNIT; MANAGE; ACCORD; RESULT

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G07B-0015/00 A I R 20060101
G08G-0001/017 A I L R 20060101
G08G-0001/09 A I L R 20060101
G07B-0015/00 C I R 20060101
G08G-0001/017 C I L R 20060101
G08G-0001/09 C I L R 20060101
US Classification, Issued: 701001000, 340928000, 701001000, 340005600

File Segment: EPI;
DWPI Class: T01; T04; T05; W02; X22
Manual Codes (EPI/S-X): T01-H01B3A; T04-K02; T05-D02; T05-H02C5C; W02-C02G7; W02-G05B; X22-X07

Original Publication Data by Authority

Original Abstracts:
...In a vehicle-onboard dedicated short-range communication (DSRC) apparatus for the DSRC communication system, a command judgment unit of an electronic toll communication-security application module...

...type of command included in a communication signal transmitted between a HOST and an IC **card** with user information held therein. A command control unit of the ETC-SAM controls whether the command is to be analyzed, according to a...

...In a **vehicle**-onboard dedicated short-range communication (DSRC) apparatus for the DSRC communication system, a **command** judgment unit of an electronic toll communication-security application module (ETC-SAM) judges the type of command included in a communication signal transmitted between a HOST and an IC **card** with user information held therein. A command control unit of the ETC-SAM **controls** whether the command is to be analyzed, according to a result of judgment by the...

Claims:

...command and ETC data included in the radio communication signal communicated with the DSRC processing **unit**; and a security module including a security processing unit including an encryption/decryption unit for...

...unit and the IC card, wherein the security processing unit further includes: a command judgment **unit** **for** judging a type of command **included** in a communication signal transmitted between **the** ETC processing **unit** and **the** IC card, and a command control **unit** for controlling whether the command is to be analyzed, according to **a** result of judgment by the command judgment unit...

... 1. A **vehicle**-onboard dedicated short-range communication (DSRC) apparatus comprising: a DSRC processing unit that processes a radio communication signal transmitted by **DSRC**; an electronic toll collection (ETC) processing unit that performs transactions of an ETC command and ETC data included in the radio communication signal communicated with the **DSRC** processing unit; and a security module including a security processing unit including an encryption/decryption...

...by the command judgment unit, wherein the command judgment unit judges whether the command included **in** the communication signal transmitted between the ETC processing unit and the IC card is an ETC command; **and** the command control unit **transmits** an execution command obtained by analyzing the ETC command to the IC card when the...

Basic Derwent Week: 200416

23/5,K/17 (Item 12 from file: 350)

0012669651 - Drawing available
WPI ACC NO: 2002-519727/ **200255**
Related WPI Acc No: 2002-528016; 2003-246836; 2003-255386; 2003-800931; 2008-A45838
XRPX Acc No: N2002-411368

Computer program for playback of encrypted content in portable device, **includes codes to** decrypt **encrypted audio or video content from memory card and playback** content **in response to** received **command**

Patent Assignee: SANDISK CORP (SAND-N)
Inventor: CHANG R C; QAWAMI B; SABET-SHARGHI F
Patent Family (12 patents, 96 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2002047080	A2	20020613	WO 2001US46661	A	20011106	200255	B
AU 200232494	A	20020618	AU 2002232494	A	20011106	200262	E
KR 2003060981	A	20030716	KR 2003707607	A	20030605	200381	E
TW 544579	A	20030801	TW 2001130438	A	20011207	200411	E
TW 558903	A	20031021	TW 2001130439	A	20011207	200424	E
KR 2004055724	A	20040626	KR 2003707604	A	20030605	200470	E
CN 1541391	A	20041027	CN 2001821449	A	20011206	200512	E
JP 2005506589	W	20050303	WO 2001US46661	A	20011106	200517	E
			JP 2002548721	A	20011106		
EP 1512147	A2	20050309	EP 2001992016	A	20011106	200518	E
			WO 2001US46661	A	20011106		
EP 1585127	A2	20051012	EP 2001992016	A	20011106	200567	E
			EP 200576389	A	20011106		
AU 2002232494	A8	20051110	AU 2002232494	A	20011106	200634	E

CN 1720578 A 20060111 CN 2001822009 A 20011106 200639 E

Priority Applications (no., kind, date): US 2000251731 P 20000207

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2002047080	A2	EN	60	10	

National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Regional Designated States, Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200232494	A	EN			Based on OPI patent WO 2002047080
TW 544579	A	ZH			
TW 558903	A	ZH			
JP 2005506589	W	JA	95		PCT Application WO 2001US46661 Based on OPI patent WO 2002047080
EP 1512147	A2	EN			PCT Application WO 2001US46661 Based on OPI patent WO 2002047080

Regional Designated States, Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

EP 1585127	A2	EN			Division of application EP 2001992016 Division of patent EP 1512147

Regional Designated States, Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

AU 2002232494	A8	EN			Based on OPI patent WO 2002047080

Alerting Abstract WO A2

NOVELTY - The program decrypts the encrypted audio or video content from a memory card and for playing back the content, in response to command from a user. The program copies location information of the encrypted content and encrypted audio/video content in a memory of a portable device.

DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

1. Portable device;

2. Stored audio or video content playing method;

3. System for enabling portable device to access encrypted music; and

4. Encrypted data accessing method.

USE - For use in portable devices such as personal computers, portable audio players, cell phones, portable organizers, portable car stereos for playing back encrypted content from memory cards or CDs.

ADVANTAGE - The program utilizes and requires only a small buffer for encryption purposes and is designed to run efficiently even in environments with limited processing power and memory. Enables an original equipment manufacturers to access encrypted content without requiring knowledge of the memory structure of the storage media.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the computer program.

Title Terms/Index Terms/Additional Words: COMPUTER; PROGRAM; PLAYBACK; ENCRYPTION; CONTENT; PORTABLE; DEVICE; CODE; AUDIO; VIDEO; MEMORY; CARD; RESPOND; RECEIVE; COMMAND

Class Codes

International Classification (Main): G06F-012/14, G06F-013/00, G11B-020/00, G11B-020/10, H04N-007/167

(Additional/Secondary): G06F-001/00, G06F-009/44, G11B-027/30, G06K-017/00, G09C-001/00

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G06F-0012/14	A	I	F R	20060101
G06F-0021/00	A	I	R	20060101
G06K-0017/00	A	I	L R	20060101
G09C-0001/00	A	I	L R	20060101
G10L-0019/00	A	I	L R	20060101

G11B-0020/00 A I F B 20060101
G11B-0020/00 A I R 20060101
G11B-0020/10 A I L R 20060101
G11B-0020/12 A I R 20060101
H04L-0009/08 A I R 20060101
H04L-0009/10 A I L R 20060101
H04N-0005/907 A I L R 20060101
G06F-0012/14 C I F R 20060101
G06F-0021/00 C I R 20060101
G06K-0017/00 C I L R 20060101
G09C-0001/00 C I L R 20060101
G10L-0019/00 C I L R 20060101
G11B-0020/00 C I L B 20060101
G11B-0020/00 C I R 20060101
G11B-0020/10 C I L R 20060101
G11B-0020/12 C I R 20060101
H04L-0009/08 C I R 20060101
H04L-0009/10 C I L R 20060101
H04N-0005/907 C I L R 20060101

File Segment: EngPI; EPI;
DWPI Class: T01; T03; W04; P85
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H01C2; T01-M06A1; T01-S02; T03-P07; W04-G01L; W04-K08; W04-K10

Computer program for playback of encrypted content in portable device, **includes codes to** decrypt **encrypted audio or video c**ontent from memory **card and playback** content **in response to** received **command**

Alerting Abstract ...in portable devices such as personal computers, portable audio players, cell phones, portable organizers, portable **car** stereos for playing back encrypted content from memory **cards** or **CDs** .

Original Publication Data by Authority

Original Abstracts:
...for original equipment manufacturers to run in electronic devices in order to access and dynamically **decrypt** encrypted audio video or other content from a memory storage **device** such as a memory card, optical or hard disk such that the user interface of the **device** need only **send** simple commands and the **decrypted content** is output...

...for original equipment manufacturers to run in electronic devices in order to access and dynamically **decrypt** encrypted audio video or other content from a memory storage **device** such as a memory card, optical or hard disk such that the user interface of the **device** need only **send** simple commands and the **decrypted content** is output...

...for original equipment manufacturers to run in electronic devices in order to access and dynamically **decrypt** encrypted audio video or other content from a memory storage **device** such as a memory card, optical or hard disk such that the user interface of the **device** need only **send** simple commands and the **decrypted content** is output...
Basic Derwent Week: **200255**

23/5,K/21 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0012314560 - Drawing available
WPI ACC NO: 2002-256106/ **200230**
XRPX Acc No: N2002-198103
Entertainment apparatus compresses and encrypts data read from recording medium for auxiliary processor
Patent Assignee: HATAKEYAMA A (HATA-I); HORIKAWA T (HORI-I); SONY COMPUTER ENTERTAINMENT INC (SONY); SONY COMPUTER ENTERTAINMENT KK (SONY)
Inventor: HATAKEYAMA A; HORIKAWA T
Patent Family (10 patents, 30 countries)
Patent Application

Number	Kind	Date	Number	Kind	Date	Update	
WO 2001065342	A1	20010907	WO 2001JP1584	A	20010301	200230	B
AU 200136035	A	20010912	AU 200136035	A	20010301	200230	E
BR 200105434	A	20020219	BR 20015434	A	20010301	200230	E
			WO 2001JP1584	A	20010301		
JP 2001318768	A	20011116	JP 200152360	A	20010227	200230	E
US 20010024503	A1	20010927	US 2001797422	A	20010301	200230	E
EP 1196837	A1	20020417	EP 2001908213	A	20010301	200233	E
			WO 2001JP1584	A	20010301		
KR 2002021093	A	20020318	KR 2001714018	A	20011102	200263	E
CN 1364250	A	20020814	CN 2001800412	A	20010301	200280	E
MX 2001010826	A1	20020501	WO 2001JP1584	A	20010301	200368	E
			MX 200110826	A	20011025		
TW 592774	A	20040621	TW 2001104898	A	20010302	200506	E

Priority Applications (no., kind, date): JP 200058045 A 20000302; JP 200152360 A 20010227

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001065342	A1	EN	21	2	
National Designated States, Original:					AU BR CA CN KR MX NZ RU SG
Regional Designated States, Original:					BE CH DE DK ES FI FR GB IT NL SE
AU 200136035	A	EN			Based on OPI patent WO 2001065342
BR 200105434	A	PT			PCT Application WO 2001JP1584
					Based on OPI patent WO 1999056428
JP 2001318768	A	JA	7		
EP 1196837	A1	EN			PCT Application WO 2001JP1584
					Based on OPI patent WO 2001065342
Regional Designated States, Original:					AL BE CH DE DK ES FI FR GB IT LI LT LV MK NL RO SE SI
MX 2001010826	A1	ES			PCT Application WO 2001JP1584
					Based on OPI patent WO 2001065342
TW 592774	A	ZH			

Alerting Abstract WO A1

NOVELTY - A main processor (7) operates a loading mechanism (6) with an auxiliary processor for reading encrypted data from a recording medium and loading it into the internal memory. A security module (9) has a recorded decryption key and provides it to the auxiliary processor for decompression. Generated digital data is loaded into the internal memory (3) via a queue (1) using direct memory access transfer.

DESCRIPTION - There are INDEPENDENT CLAIMS for

1. a semiconductor device in an entertainment apparatus,

2. a computer program

3. a computer processor loading method.

USE - Apparatus is for loading digital information into an internal memory from an external recording medium such as a CD-ROM or DVD-ROM

ADVANTAGE - Apparatus reads program code from the external medium without overloading the CPU.

DESCRIPTION OF DRAWINGS - The figure shows the apparatus with

1 queue
3 internal memory
6 loading mechanism
7 main processor
9 security module

Title Terms/Index Terms/Additional Words: ENTERTAINMENT; APPARATUS; COMPRESS; DATA; READ; RECORD; MEDIUM; AUXILIARY; PROCESSOR

Class Codes

International Classification (Main): A63F-009/22, G06F-009/06
(Additional/Secondary): G06F-003/05

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
A63F-0013/10	A	I	R	20060101
G06F-0003/08	A	I	F R	20060101
G11B-0020/10	A	I	L R	20060101

A63F-0013/10 C I R 20060101
G06F-0003/08 C I F R 20060101
G11B-0020/10 C I L R 20060101
US Classification, Issued: 380200000

File Segment: EngPI; EPI;
DWPI Class: T01; W04; P36
Manual Codes (EPI/S-X): T01-C01A; T01-D01; T01-F01B; T01-H05B2; T01-J12C; T01-S03; W04-C10A1; W04-C10A2

Original Publication Data by Authority

Original Abstracts:
The entertainment apparatus comprises a main **bus** and a subbus, **which** are connected to each other via a center **bus** having a queue. A CPU, a memory, an image processor and a DMAC are connected to the main **bus**. A **disk** drive, **an** I/O processor, a sound processor, and a security module are connected to the subbus. A program..

...The entertainment apparatus comprises a main **bus** and a subbus, which are connected to each **other** via a center **bus** having a queue. A CPU, a memory, an **image** processor and a DMAC are connected to the main **bus**. A **disk** drive, an I/O processor, a **sound** processor, **and** a security module are connected to the subbus. A program code, which is compressed and partially encrypted, is recorded on a secondary recording medium. The I/O processor obtains a **decryption** key from the security module. The I/O **processor decrypts** digital information read from the secondary recording **medium based** on the **decryption** key and decompresses the digital information. The decompressed **digital** information is written into the memory via the queue **using** a DMA **transfer**.

...

...The entertainment apparatus comprises a main **bus** and a subbus, which are connected to each other via a center **bus having** a queue. A CPU, a memory, an image processor and a DMAC **are** connected to the main **bus**. A **disk** drive, an I/O processor, a sound processor, and a security **module** are **connected** to the subbus. A program code, which is compressed and partially encrypted, is recorded on a secondary recording medium. The I/O processor obtains a **decryption** key from the security module. The I/O processor **decrypts** digital information read **from** the secondary recording medium based on the **decryption key and** decompresses the digital information. The decompressed digital information is written into **the** memory via the queue using **a** DMA transfer.

Basic Derwent Week: **200230**

23/5,K/22 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010833615 - Drawing available
WPI ACC NO: 2001-451240/ **200148**
XRPX Acc No: N2001-334137
Data distribution system with encryption card
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA KK (NPCO); SANYO ELECTRIC CO LTD (SACL); DENON CO LTD (NPCO); RENESAS TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; FURUTA S; FURUTA S F L; HASEBE T; HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HATANAKA M; HATANAKA M F L; HICKI T; HICKI T S E C L; HORI Y; HORI Y S E C L; KAMADA F L; KAMADA J; KANAMORI M; KANAMORI M S E C L; KINOSHITA T; KINOSHITA T S; KOTANI S; KOTANI S F L
Patent **Family** (9 patents, 94 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001016932	A1	20010308	WO 2000JP5770	A	20000825	200148	B
AU 200067318	A	20010326	AU 200067318	A	20000825	200148	E
EP 1221690	A1	20020710	EP 2000955044	A	20000825	200253	E
			WO 2000JP5770	A	20000825		

CN 1382292	A	20021127	CN 2000814631	A	20000825	200322	E
JP 2001520398	X	20030325	WO 2000JP5770	A	20000825	200323	E
			JP 2001520398	A	20000825		
TW 499669	A	20020821	TW 2001104238	A	20010223	200333	E
CN 1231885	C	20051214	CN 2000814631	A	20000825	200654	E
US 7181629	B1	20070220	WO 2000JP5770	A	20000820	200716	E
			US 200269112	A	20020619		
JP 4010481	B2	20071121	WO 2000JP5770	A	20000825	200780	E
			JP 2001520398	A	20000825		

Priority Applications (no., kind, date): JP 1999241747 A 19990827; JP 1999345229 A 19991203

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001016932	A1	JA	142	56	

National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Regional Designated States, Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200067318	A	EN		Based on OPI patent WO 2001016932
EP 1221690	A1	EN		PCT Application WO 2000JP5770
				Based on OPI patent WO 2001016932

Regional Designated States, Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 2001520398	X	JA		PCT Application WO 2000JP5770
				Based on OPI patent WO 2001016932
TW 499669	A	ZH		
US 7181629	B1	EN		PCT Application WO 2000JP5770
				Based on OPI patent WO 2001016932
JP 4010481	B2	JA	70	PCT Application WO 2000JP5770
				Based on OPI patent WO 2001016932

Alerting Abstract WO A1

NOVELTY - Memory **card** (110) extracts session key by decoding data provided on data **bus** (BS3) through cellular network from server. Encryption unit (1406) encrypts public key Kpcard (1) of memory **card** (110) based on session key and sends it to server over data **bus**. Register (1500) stores decrypted data, such as license ID and user ID and memory (1412) stores content data ([Dc]Kc) encrypted by license key (Kc) and supplied over data **bus** (BS3).

USE - Data distribution system with encryption card.

DESCRIPTION OF DRAWINGS - BS3 Data bus

1 Kpcard

110 Memory card

1406 Encryption means

1412 Memory

1500 Register

Title Terms/Index Terms/Additional Words: DATA; DISTRIBUTE; SYSTEM; ENCRYPTION; CARD

Class Codes

International Classification (Main): G10K-015/02

(Additional/Secondary): G06F-013/00, G06F-015/00, G06F-017/30, G06K-019/00, G10L-019/00, H04H-001/00, H04L-012/28, H04L-009/08, H04L-009/10, H04L-009/32, H04M3-011/08, H04M3-003/42, H04M3-003/493

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G10K-0015/02	A	I	R	20060101
H04L-0029/06	A	I	R	20060101
H04L-0009/08	A	I	R	20060101
H04L-0009/10	A	I	R	20060101
H04L-0009/32	A	I	F B	20060101
G06F-0013/00	A	I	L B	20060101
G06F-0015/00	A	I	L B	20060101
G10K-0015/02	A	I	F B	20060101
G10L-0019/00	A	I	L B	20060101
H04L-0012/00	A	I	L B	20060101
H04L-0009/08	A	I	L B	20060101

H04L-0009/10 A I L B 20060101
H04M-0011/08 A I L B 20060101
G10K-0015/02 C I R 20060101
H04L-0029/06 C I R 20060101
H04L-0009/08 C I R 20060101
H04L-0009/10 C I R 20060101
H04L-0009/32 C I B 20060101
G06F-0013/00 C I B 20060101
G06F-0015/00 C I B 20060101
G10K-0015/02 G I B 20060101
G10L-0019/00 C I B 20060101
H04L-0012/00 C I B 20060101
H04L-0009/08 C I B 20060101
H04L-0009/10 C I B 20060101
H04M-0011/08 C I B 20060101
US Classification, Issued: 713194000, 713189000

File Segment: EngPI; EPI;
DWPI Class: T01; T04; W01; W02; W04; P86
Manual Codes (EPI/S-X): T01-H01B3A; T01-J05A; T04-K02; W01-A03B; W01-A05A; W01-A06E1A; W01-A06G2; W01-C02B; W01-C05B5; W01-C05B5C; W02-D; W04-V05G

...NOVELTY - Memory **card** (110) extracts session key by decoding data provided on data **bus** (BS3) through cellular network from server. Encryption unit (1406) encrypts public key Kpcard (1) of memory **card** (110) based on session key and sends it to server over data **bus** . Register (1500) stores decrypted data, such as license ID and user ID and memory (1412) stores content data ([Dc]Kc) encrypted by license key (Kc) and supplied over data **bus** (BS3).

Original Publication Data by Authority

Original Abstracts:
...to extract a session key Ks from data applied from a server to a data **bus** BS3 over a cellular phone network. An encryption processing unit 1406 encrypts public encryption key KPcard(1) of memory **card** 110 based on session key Ks, and applies the same to the server via data **bus** BS3. A register 1500 receives and stores data such as decrypted license ID and user....
...and a memory 1412 receives and stores encrypted content data [Dc]Kc applied from data **bus** BS3 and encrypted with a license key Kc...

...A memory **card** performs decryption processing to extract a session key from data applied from a server to a data **bus** over a cellular phone network. An encryption processing unit encrypts a public encryption key of memory **card** based on a session key, and applies the same to the server via data **bus** . A register receives and stores data such as a decrypted license ID and a user...

...the server, and a memory receives and stores encrypted content data applied from a data **bus** and encrypted with a license key...

...A memory **card** (110) extracts a session key (Ks) by decoding data provided on a data **bus** (BS3) through a cellular network from a server. Encryption means (1406) encrypts a public key KPcard (1) of the memory **card** (110) based on the session key Ks and sends it to the server over the data **bus** (BS3). A register (1500) stores decrypted data, such as a license ID and a user...
Claims:
...key; a first license data encryption processing unit (320) for encrypting a license key for **decrypting** said encrypted content data using, as key data, the data **decrypted** by said session key **decrypting** unit ; and a second license data encryption processing **unit** (322) for further encrypting an output of said first license data encryption processing unit with...

...unit (110) for receiving and storing said encrypted content data; and said distributed data decoding **unit** includes: a first key holding unit (1402) for holding a first private **decryption** key for **decrypting** the data encrypted by said first public encryption key, a first decryption processing unit (1404...

...holding a second private decryption key for decrypting the data encrypted with said second public **encryption** key, and a third decryption processing unit (1416) for decrypting said license key with said...

...key extracted by said session key decrypting unit; anda second license data encryption processing **unit** for further encrypting the output of said first license data encryption processing **unit** with said second symmetric key extracted by said session key **decrypting unit**, and supplying the encrypted output to said first interface **unit**, wherein each of said terminals includes a second interface unit for externally **transmitting** the data, anda data storing unit for **receiving** and storing at least said license key from said content data supply device; said first...
Basic Derwent Week: **200148**

23/5,K/23 (Item 18 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010808902 - Drawing available
WPI ACC NO: 2001-425346/ **200145**
XRPX Acc No: N2001-315582
Memory card and data distribution system for storage and redistribution of data
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA KK (NPCO); PFU LTD (USAE); SANYO ELECTRIC CO LTD (SACL); ANNAZAWA T (ANNA-I); FURUTA S (FURU-I); HASEBE T (HASE-I); HATAKEYAMA T (HATA-I); HICKI T (HICK-I); HORI Y (HORI-I); KANAMORI M (KANA-I); TAKAHASHI M (TAKA-I); TAKEMURA H (TAKE-I); TONEGAWA T (TONE-I); YOSHIKAWA T (YOSH-I); DENON CO LTD (NPCO); RENESAS TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; ANNAZAWA T; FURUTA S; FURUTA S F L; HASEBE T; HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HICKI T; HICKI T S E C L; HORI Y; HORI Y S E C L; KANAMORI M; KANAMORI M S E C L; TAKAHASHI M; TAKAHASHI M P L; TAKEMURA H; TAKEMURA H S E C L; TONEGAWA T; TONEGAWA T S; YOSHIKAWA T; YOSHIKAWA T S E C L
Patent Family (9 patents, 94 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001041356	A1	20010607	WO 2000JP8544	A	20001201	200145	B
AU 200115574	A	20010612	AU 200115574	A	20001201	200154	E
EP 1237324	A1	20020904	EP 2000978073	A	20001201	200266	E
			WO 2000JP8544	A	20001201		
US 20020184154	A1	20021205	WO 2000JP8544	A	20001201	200301	E
			US 2002130301	A	20020531		
TW 493333	A	20020701	TW 2000125701	A	20001202	200329	E
JP 2001542505	X	20030603	WO 2000JP8544	A	20001201	200346	E
			JP 2001542505	A	20001201		
CN 1433608	A	20030730	CN 2000818755	A	20001201	200365	E
CN 1277364	C	20060927	CN 2000818755	A	20001201	200706	E
JP 3873090	B2	20070124	WO 2000JP8544	A	20001201	200708	E
			JP 2001542505	A	20001201		

Priority Applications (no., kind, date): JP 1999343389 A 19991202

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001041356	A1	JA	75	24	
National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States, Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200115574	A	EN			Based on OPI patent WO 2001041356
EP 1237324	A1	EN			PCT Application WO 2000JP8544 Based on OPI patent WO 2001041356
Regional Designated States, Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 20020184154	A1	EN			PCT Application WO 2000JP8544
TW 493333	A	ZH			
JP 2001542505	X	JA			PCT Application WO 2000JP8544

				Based on OPI patent WO 2001041356
JP 3873090	B2	JA	36	PCT Application WO 2000JP8544 Based on OPI patent WO 2001041356

Alerting Abstract WO A1

NOVELTY - Memory **card** (110) extracts first cession key (Ks1) and transaction ID from server by decrypting data on data **bus** (BS3). It generates second cession key (Ks2) with cession key generating section (1418), encrypts it and key (KPm(1)) unique to memory **card** (110), with first cession key and transmits to server as keys for encrypting content key.

DESCRIPTION - A memory **card** (110) performs authentication with a server based on data held in an authentication data holding section (1400). The memory **card** (110) extracts a first cession key (Ks1) and a transaction ID from the server by decrypting data placed on a data **bus** (BS3). Furthermore, the memory **card** (110) generates a second cession key (Ks2) by means of a cession key generating section (1418), encrypts the second cession key (Ks2) and a key (KPm(1)) unique to the memory **card** (110) with the first cession key (Ks1) and transmits them to the server as keys for encrypting the content key when the content key is decrypted. The transaction ID and the second cession key (Ks2) held in a log memory (1460) are used in redistribution.

USE - Memory card and data distribution system for storage and redistribution of data.

DESCRIPTION OF DRAWINGS - Diagram of memory card. (Drawing contains non-English language text)

110 Memory card
1400 Authentication data holding section
Ks1 First cession key
BS3 Data bus
Ks2 Second cession key
1418 Cession key generating section
KPm(1 Key
1460 Log memory

Title Terms/Index Terms/Additional Words: MEMORY; CARD; DATA; DISTRIBUTE; SYSTEM; STORAGE; REDISTRIBUTE

Class Codes

International Classification (Main): G06F-015/00, H04M-011/08
(Additional/Secondary): G06F-012/14, G06F-017/60, G06K-019/00, G06K-019/10, G09C-001/00, H04L-009/08, H04L-009/10, H04L-009/14, H04L-009/16, H04L-009/32

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G06F-0001/00	A	I	R	20060101
G06F-0021/00	A	I	R	20060101
H04L-0009/10	A	I	R	20060101
G06F-0012/14	A	I	L	20060101
G06F-0012/14	A	I	L B	20060101
G06F-0013/00	A	I	L	20060101
G06F-0021/00	A	I	F B	20060101
G06K-0019/00	A	I	L B	20060101
G06K-0019/10	A	I	L B	20060101
G06Q-0030/00	A	I	L B	20060101
G06Q-0050/00	A	I	L B	20060101
G09C-0001/00	A	I	L B	20060101
G10K-0015/02	A	I	L	20060101
H04L-0009/08	A	I	L B	20060101
H04L-0009/10	A	I	F	20060101
H04L-0009/10	A	I	L B	20060101
H04L-0009/14	A	I	L B	20060101
H04L-0009/16	A	I	L B	20060101
H04L-0009/32	A	I	L B	20060101
G06F-0001/00	C	I	R	20060101
G06F-0021/00	C	I	R	20060101
H04L-0009/10	C	I	R	20060101
G06F-0012/14	C	I		20060101
G06F-0012/14	C	I	L B	20060101
G06F-0013/00	C	I		20060101
G06F-0021/00	C	I	F B	20060101
G06K-0019/00	C	I	L B	20060101
G06K-0019/10	C	I	L B	20060101

G06Q-0030/00 C I L B 20060101
G06Q-0050/00 C I L B 20060101
G09C-0001/00 C I L B 20060101
G10K-0015/02 C I 20060101
H04L-0009/08 C I L B 20060101
H04L-0009/10 C I 20060101
H04L-0009/10 C I L B 20060101
H04L-0009/14 C I L B 20060101
H04L-0009/16 C I L B 20060101
H04L-0009/32 C I L B 20060101
US Classification, Issued: 705050000

File Segment: EngPI; EPI;
DWPI Class: T01; W01; P85; P86
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H05B; W01-A05A

Alerting Abstract ...NOVELTY - Memory card (110) extracts first cession key (Ks1) and transaction ID from server by decrypting data on data bus (BS3). It generates second cession key (Ks2) with cession key generating section (1418), encrypts it and key (KPm(1)) unique to memory card (110), with first cession key and transmits to server as keys for encrypting content key. DESCRIPTION - A memory card (110) performs authentication with a server based on data held in an authentication data holding section (1400). The memory card (110) extracts a first cession key (Ks1) and a transaction ID from the server by decrypting data placed on a data bus (BS3). Furthermore, the memory card (110) generates a second cession key (Ks2) by means of a cession key generating section...
...encrypts the second cession key (Ks2) and a key (KPm(1)) unique to the memory card (110) with the first cession key (Ks1) and transmits them to the server as keys...

Original Publication Data by Authority

Original Abstracts:
A memory card (110) conducts an authentication process with a server based on data stored in an authentication data hold unit (1400). The memory card (110) extracts a first session key (Ks1) from a server by a decryption process and a transaction ID from the data applied on a data bus (BS3). The memory card (110) generates a second session key (Ks2) through a session key generation unit (1418), and transmits to the server, as the keys to encrypt content data, the second session key (Ks2) and a key (KPm(1)) unique to the memory card (110) in an encrypted state with the first session key (Ks1). The transaction ID and...

...A memory card (110) conducts an authentication process with a server based on data stored in an authentication data hold unit (1400). The memory card (110) extracts a first session key (Ks1) from a server by a decryption process and a transaction ID from the data applied on a data bus (BS3). The memory card (110) generates a second session key (Ks2) through a session key generation unit (1418), and transmits to the server, as the keys to encrypt content data in receiving decryption of content data, the second session key (Ks2) and a key (KPm(1)) unique to the memory card (110) in an encrypted state with the first session key (Ks1). The transaction ID and...

...A memory card (110) performs authentication with a server based on data held in an authentication data holding section (1400). The memory card (110) extracts a first cession key (Ks1) and a transaction ID from the server by decrypting data placed on a data bus (BS3). Furthermore, the memory card (110) generates a second cession key (Ks2) by means of a cession key generating section...

...encrypts the second cession key (Ks2) and a key (KPm(1)) unique to the memory card (110) with the first cession key (Ks1) and transmits them to the server as keys...
Basic Derwent Week: 200145

23/5,K/24 (Item 19 from file: 350)

0010808895 - Drawing available
WPI ACC NO: 2001-425339/ **200145**
XRPX Acc No: N2001-315575
Recorder for encrypting and decrypting data
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA KK (NPCO); SANYO ELECTRIC CO LTD (SAOL); ANAZAWA T (ANAZ-I); HASEBE T (HASE-I); HATAKEYAMA T (HATA-I); HICKI T (HICK-I); HORI Y (HORI-I); KANAMORI M (KANA-I); KOTANI S (KOTA-I); TCNEGAWA T (TCNE-I); DENON CO LTD (NPCO); RENESAS TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; HASEBE T; HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HICKI T; HICKI T S E C L; HORI Y; HORI Y S E C L; KANAMORI M; KANAMORI M S E C L; KOTANI S; KOTANI S F L; TCNEGAWA T; TCNEGAWA T S
Patent Family (9 patents, 94 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001041104	A1	20010607	WO 2000JP8457	A	20001129	200145	B
AU 2001116494	A	20010612	AU 2001116494	A	20001129	200154	E
EP 1248248	A1	20021009	EP 2000979025	A	20001129	200267	E
			WO 2000JP8457	A	20001129		
US 20020184513	A1	20021205	WO 2000JP8457	A	20001129	200301	E
			US 2002130294	A	20020530		
TW 493332	A	20020701	TW 2000125435	A	20001130	200329	E
JP 2001542083	X	20030603	WO 2000JP8457	A	20001129	200346	E
			JP 2001542083	A	20001129		
CN 1425173	A	20030618	CN 2000818632	A	20001129	200358	E
US 7158641	B2	20070102	WO 2000JP8457	A	20001129	200703	E
			US 2002130294	A	20020530		
JP 3934941	B2	20070620	WO 2000JP8457	A	20001129	200742	E
			JP 2001542083	A	20001129		

Priority Applications (no., kind, date): JP 1999340365 A 19991130

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001041104	A1	JA	77	27	
National Designated States,Original:			AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW		
Regional Designated States,Original:			AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW		
AU 2001116494	A	EN			Based on OPI patent WO 2001041104
EP 1248248	A1	EN			PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104
Regional Designated States,Original:			AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR		
US 20020184513	A1	EN			PCT Application WO 2000JP8457
TW 493332	A	ZH			
JP 2001542083	X	JA			PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104
US 7158641	B2	EN			PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104
JP 3934941	B2	JA	37		PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104

Alerting Abstract WO A1
NOVELTY - Memory **card** (110) decodes data delivered to data **bus** (BS3) and extracts session key (Ks1) sent from server from data. Based on session key (Ks1), encrypting section (1406) encrypts public encryption key (KPm(1)) of memory **card** (110) and delivers it to server through data **bus** (BS3). Memory **card** (110) receives data including license key (Kc) and license (ID) encrypted with public encryption key (KPm(1)) different with memory **card** to memory **card**, decrypts data, encrypted it again with uniquely given secret key (K(1)), and stores it in memory (1415).
USE - Recorder for encrypting and decrypting data
DESCRIPTION OF DRAWINGS - 110 Memory card
1406 Encrypting section
Kc License key

K(1 Secret key
1415 Memory

Title Terms/Index Terms/Additional Words: RECORD; DATA

Class Codes
International Classification (Main): H04L-009/10, H04M-011/08
(Additional/Secondary): G11B-020/10, H04L-012/28, H04L-009/08
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0001/00 A I R 20060101
G06Q-0020/00 A I R 20060101
G06Q-0030/00 A I R 20060101
G07F-0017/16 A I R 20060101
G07F-0007/00 A I R 20060101
G07F-0007/10 A I R 20060101
H04L-0009/00 A I F B 20060101
H04L-0009/08 A I R 20060101
H04L-0009/30 A N R 20060101
H04L-0009/32 A I L B 20060101
H04L-0012/28 A I L B 20060101
H04L-0009/08 A I L B 20060101
H04L-0009/10 A I F B 20060101
G06F-0001/00 C I R 20060101
G06Q-0020/00 C I R 20060101
G06Q-0030/00 C I R 20060101
G07F-0017/00 C I R 20060101
G07F-0007/00 C I R 20060101
G07F-0007/10 C I R 20060101
H04L-0009/08 C I R 20060101
H04L-0009/28 C N R 20060101
H04L-0012/28 C I B 20060101
H04L-0009/08 C I B 20060101
H04L-0009/10 C I B 20060101
US Classification, Issued: 713193000, 380277000, 380272000, 380044000, 380046000, 713189000

File Segment: EngPI; EPI;
DWPI Class: T01; W01; P85
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H05B; T01-H07C5S; W01-A05A; W01-C01D1

...NOVELTY - Memory **card** (110) decodes data delivered to data **bus** (BS3) and extracts session key (Ks1) sent from server from data. Based on session key (Ks1), encrypting section (1406) encrypts public encryption key (KPm(1)) of memory **card** (110) and delivers it to server through data **bus** (BS3). Memory **card** (110) receives data including license key (Kc) and license (LD) encrypted with public encryption key (KPm(1)) different with memory **card** to memory **card**, decrypts data, encrypted it again with uniquely given secret key (K(1)), and stores it...

Original Publication Data by Authority

Original Abstracts:
A memory **card** (110) decrypts data applied from a data **bus** (BS3) to extract a session key (Ks1) from a server. An encryption processing portion (1406) encrypts a public encryption key (KPm(1)) of the memory **card** (110) based on the session key (Ks1), and applies the encrypted key to the server via the data bus (BS3). The memory **card** (110) receives data such as a license key (Kc) and a license (LD) encrypted with the public encryption key (KPm(1)) unique to each memory **card**, decrypts the received data and stores the received data in a memory (1415) after encrypting...

...A memory **card** (110) decodes data delivered to a data **bus** (BS3) and extracts a session key (Ks1) sent from a server from the data. Based...

...Ks1), an encrypting section (1406) encrypts a public encryption key (KPm(1)) of the memory **card** (110) and delivers it to a server through the data **bus** (BS3). The memory **card** (110) receives data including a license key (Kc) and a license

(ID) encrypted with the public encryption key (KPm (1)) different with memory **card** to memory **card**, decrypts the data, encrypted it again with uniquely given secret key (K(1)), and stores...

...A memory **card** (110) decodes data delivered to a data **bus** (BS3) and extracts a session key (Ks1) sent from a server from the data. Based...

...Ks1), an encrypting section (1406) encrypts a public encryption key (KPm (1)) of the memory **card** (110) and delivers it to a server through the data **bus** (BS3). The memory **card** (110) receives data including a license key (Kc) and a license (ID) encrypted with the public encryption key (KPm (1)) different with memory **card** to memory **card**, decrypts the data, encrypted it again with uniquely given secret key (K(1)), and stores...

...A memory **card** (110) decodes data delivered to a data **bus** (BS3) and extracts a session key (Ks1) sent from a server from the data. Based...

...Ks1), an encrypting section (1406) encrypts a public encryption key (KPm (1)) of the memory **card** (110) and delivers it to a server through the data **bus** (BS3). The memory **card** (110) receives data including a license key (Kc) and a license (ID) encrypted with the public encryption key (KPm (1)) different with memory **card** to memory **card**, decrypts the data, encrypted it again with uniquely given secret key (K(1)), and stores...

Claims:

...encrypted with a first public encryption key (KPm(i)) predetermined with respect to the recording **device**, comprising: a first key holding portion (1421) for holding a first private **decryption** key (Km(i)) being asymmetric to said first public encryption key and used for decrypting data encrypted with said first public encryption key; a first decryption processing portion (1422) for **receiving** the data encrypted with said first public encryption key, and decrypting the **received** data with said first private decryption key; a second key holding portion (1450, 1451) for holding...

Basic Derwent Week: **200145**

23/5,K/26 (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010281318 - Drawing available
WPI ACC NO: 2000-594460/ **200056**
XRPX Acc No: N2001-025262
Data processing system for collecting flight data for producing pilot report logs, has portable memory device which is downloaded on a ground station processing station by authorized personnel
Patent Assignee: APEC AEROSPACE PTE LTD (APEC-N); M L-CCM TECHNOLOGIES PTE LTD (M LC-N)
Inventor: JIANG J L; LIU J J
Patent Family (3 patents, 89 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2000055770	A2	20000921	WO 2000SG35	A	20000313	200056	B
AU 200035796	A	20001004	AU 200035796	A	20000313	200101	E
US 6278913	B1	20010821	US 1999267500	A	19990312	200150	E

Priority Applications (no., kind, date): US 1999267500 A 19990312

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000055770	A2	EN	28	12	

National Designated States, Original: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Regional Designated States, Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200035796 A EN Based on OPI patent WO 2000055770

Alerting Abstract WO A2

NOVELTY - The system accesses signals transmitted on an airborne data bus (layer 2), where the signals represent sensor readings. The sensors (layer 1) on the aircraft are used to measure flight parameters for the entire flight. The signals are then transferred to a smart log box (layer 3) which then samples, filters, decodes, encodes and compresses the signals prior to being stored on a portable, self protected secure memory device, e.g. smart card.

DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of processing flight parameter data.

USE - For recording and monitoring flight data for analyzing and processing the data.

ADVANTAGE - To monitor a pilots performance, the operation of the aircraft and identifying potential mechanical or safety problems.

DESCRIPTION OF DRAWINGS - The figure shows a diagram of the automated flight data management.

1 Sensors
2 Digital airborne data bus
3 Smart log box

Title Terms/Index Terms/Additional Words: DATA; PROCESS; SYSTEM; COLLECT; FLIGHT; PRODUCE; PILOT; REPORT; LOG; PORTABLE; MEMORY; DEVICE; GROUND; STATION; PERSONNEL

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
G06F-0017/40 A I R 20060101
G06F-0017/40 C I R 20060101
US Classification, Issued: 701003000, 701014000, 701025000, 701035000, 701120000, 702144000, 073181000, 244158000

File Segment: EPI;
DWPI Class: T01; T04; W01; W05; W06
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-J05A2; T01-J07A3; T04-K02; W01-A02A; W01-A05; W05-D05B; W05-D07D; W06-B01B5; W06-B01B6; W06-B01B8; W06-B02D; W06-B02X

...bus (layer 2), where the signals represent sensor readings. The sensors (layer 1) on the aircraft are used to measure flight parameters for the entire flight. The signals are then transferred...

...prior to being stored on a portable, self protected secure memory device, e.g. smart card.

Original Publication Data by Authority

Original Abstracts:
...self-protected secure memory device. After the flight ends, the portable, self-protected secure memory device is transferred to ground personnel. The data stored on the memory device is then accessed by authorized personnel, decompressed and decrypted. The flight data is analyzed and used to evaluate pilot performance and monitor the operation of the aircraft throughBasic Derwent Week: 200056

23/5,K/28 (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0009657759 - Drawing available
WPI ACC NO: 1999-610660/ 199952
XRPX Acc No: N1999-449961
Organizing and transferring data among functional blocks of integrated system of read channel of data recorded on DVD-ROM, DVD-RAM and DVD-R for performing Reed-Solomon decoding
Patent Assignee: STMICROELECTRONICS SRL (SGSA)
Inventor: ANDOLINA G; BRENNA F; DE MARZI G; UGHETTI R
Patent Family (6 patents, 18 countries)
Patent Application
Number Kind Date Number Kind Date Update
WO 1999048097 A1 19990923 WO 1998IT56 A 19980318 199952 B

EP 986814	A1	20000322	EP 1998908287	A	19980318	200019	E
			WO 1998IT56	A	19980318		
JP 2002501655	W	20020115	WO 1998IT56	A	19980318	200207	E
			JP 1999546810	A	19980318		
US 6594794	B1	20030715	WO 1998IT56	A	19980318	200348	E
			US 1999424144	A	19991118		
EP 986814	B1	20031105	EP 1998908287	A	19980318	200377	E
			WO 1998IT56	A	19980318		
DE 69819498	E	20031211	DE 69819498	A	19980318	200405	E
			EP 1998908287	A	19980318		
			WO 1998IT56	A	19980318		

Priority Applications (no., kind, date): WO 1998IT56 A 19980318

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1999048097	A1	EN	61	31	

National Designated States, Original: JP US

Regional Designated States, Original: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

EP 986814	A1	EN	PCT Application WO 1998IT56 Based on OPI patent WO 1999048097

Regional Designated States, Original: DE FR GB IT

JP 2002501655	W	JA 60	PCT Application WO 1998IT56 Based on OPI patent WO 1999048097
US 6594794	B1	EN	PCT Application WO 1998IT56 Based on OPI patent WO 1999048097
EP 986814	B1	EN	PCT Application WO 1998IT56 Based on OPI patent WO 1999048097

Regional Designated States, Original: DE FR GB IT

DE 69819498	E	DE	Application EP 1998908287 PCT Application WO 1998IT56 Based on OPI patent EP 986814 Based on OPI patent WO 1999048097

Alerting Abstract WO A1

NOVELTY - An embedded RAM (DRAM) is refreshed while decoding of two blocks is in progress. Two columns of 208 bytes each of the stored input blocks is decoded by reading the columns word by word from the embedded RAM (DRAM) and performing parallel Reed-Solomon decoding on two columns at the time in the Reed-Solomon decoder, correcting errors and storing decoding flags in the embedded RAM (DRAM).

USE - In a read-channel circuitry of data read from a mass memory support such as a DVD or a CD for decoding according to the Reed-Solomon algorithm data read from a mass memory support coded according to standard DVD-ROM, DVD-R, DVDRAM or CD-ROM protocols.

ADVANTAGE - Provides considerable increase of the required processing speed capabilities in a fully integrated decoder (ECC-IC) may be obtained by organizing the data flow within the integrated decoder and the embedded RAM in a way as to reduce the number of accesses to the embedded RAM needed to perform the decoding at the required speed while using the Reed-Solomon decoding block at twice the maximum clock frequency allowed by the embedded RAM (25MHz).

DESCRIPTION OF DRAWINGS - The drawing is an architectural layout of the multifunction decoder ECC-IC of the invention.

Title Terms/Index Terms/Additional Words: TRANSFER; DATA; FUNCTION; BLOCK; INTEGRATE; SYSTEM; READ; CHANNEL; RECORD; ROM; RAM; PERFORMANCE; REED; DECODE

Class Codes

International Classification (Main): G11B-020/18

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G06F-0011/10	A	I F	R	20060101
G11B-0020/18	A	I L	R	20060101
H03M-0013/00	A	I	R	20060101
H03M-0013/15	A	I L	R	20060101
G06F-0011/10	C	I F	R	20060101
G11B-0020/18	C	I L	R	20060101
H03M-0013/00	C	I L	R	20060101

US Classification, Issued: 714784000

File Segment: EPI;
DWPI Class: T03; U21; W04
Manual Codes (EPI/S-X): T03-B05; T03-N01; U21-A06; W04-C05; W04-C10A3

Original Publication Data by Authority

Original Abstracts:
...a read channel of data recorded on DVD-Rom, DVD-Ram, DVD-R or CD Rom for performing **Reed**-Solomon decoding including off-line heroic correction, or deinterleaving, Reed-Solomon decoding and correction, said integrated system including an input buffer (INPUT BUFFER), an interface with a microcontroller **bus** (muP IF), a **Reed**-Solomon decoder (REED-SOLOMON DECODER), an embedded RAM (DRAM) accessed through a 17-bit **bus**, a descrambling and **EDC** control block (DESCRAMBLING & EDC) for **DVD** modes of operation **a** descrambling block (DESCRAMBLING **CD**) for **CD** modes **of** operations, **a** data output interface (OUTPUT INTERFACE) and a timing control block (TIMING CONTRCL), permits the decoding...

...the functional blocks of an integrated system of a read channel of data recorded on **DVD**-Rom, **DVD**-Ram, **DVD**-R or **CD** Rom **for** performing **Reed**-Solomon **decoding** including off-**line** heroic correction, or deinterleaving, Reed-Solomon decoding is provided. The integrated system includes an input buffer, an interface **with** a microcontroller **bus**, a Reed-Solomon decoder, an embedded RAM accessed **through** a 17-bit **bus**, a descrambling and EDC control block for **DVD modes** of operation, a descrambling block for **CD codes** of operations, a data output interface, and **a** timing control block. The system permits the de coding of the input data acquired through...

...input buffer at a rate of up to four-times the reference bit rate of **DVD** formatted data using a clock for accessing the embedded RAM having a frequency half that...

...on DVD-Rom, DVD-Ram, DVD-R or CD Rom for performing Reed-Solomon decoding **including** off-**line** heroic **correction**, or deinterleaving, **Reed**-Solomon decoding and correction, said integrated system including an input buffer (INPUT BUFFER), an interface with a microcontroller **bus** (muP IF), a Reed-Solomon decoder (REED-SOLOMON DECODER), an embedded RAM (DRAM) **accessed** through a 17-bit **bus**, a descrambling and EDC control block (DESCRAMBLING & EDC) for **DVD** modes of operation **a** descrambling block (DESCRAMBLING **CD**) for **CD** modes of operations, **a** data output interface (OUTPUT INTERFACE) and a **timing** control **block** (TIMING CONTRCL), permits the decoding of the input data acquired through said input buffer (INPUT BUFFER) at a rate of up to four-times the reference bit rate of DVD formatted data using a clock for accessing said embedded RAM having a frequency half that...

...DVD-R ou CD Rom afin de proceder a un decodage REED-Solomon, y compris **des** corrections **heroiques** autonomes, **ou** un desentrelacement, **un** decodage REED-Solomon et une correction, ledit systeme integre comprenant un tampon d'entree (TAMPON ENTREE), une interface avec un **bus** microcontroleur (muP IF), un decodeur REED-Solomon (DECODEUR REED-SOLOMON), une memoire RAM integree (DRAM) a laquelle accede **un bus** 17 bits, un bloc de commande de desembrouillage et EDC (DESEMBROUILLAGE et EDC) pour des modes **DVD** de **fonctionnement** d'un bloc de desembrouillage (DESEMBROUILLAGE **CD**) pour modes **CD** de fonctionnements, une interface de sortie **de** donnees (INTERFACE SORTIE) et un bloc de commande **de** synchronisation (COMMANDE **SYNCHRONISATION**), permettant le decodage des donnees d'entree acquises par l'intermediaire dudit tampon d'entree...
Claims:
...eines integrierten Systems (ECC-IC) eines Lesekanals von Daten, die auf DVD-ROM, DVD-RAM **und** DVD-R **aufgezeichnet** sind, zur Durchfuhrung einer Reed-Solomon-Decodierung, die eine drastische Offline-Korrektur einschliesst, wobei das...

...Solomon-Decoder (REED-SOLOMON DECODER), ein eingebettetes RAM (DRAM), auf das durch einen 17-Bit-**Bus** zugegriffen **wird**, einen Entwurfelungs- und EDC-Steuerblock (DESCRAMBLING & EDC) fur **DVD**-Betriebsarten, **eine** Datenausgabeschnittstelle (OUTPUT INTERFACE) und einen Timingsteuerblock (TIMING CONTRCL), dadurch gekennzeichnet, dass die Decodierung der

Eingangsdaten...

...Eingangspuffer (INPUT BUFFER) erfasst werden, mit einer Rate von bis zum vierfachen der Referenzbitrate von DVD-formatierten Daten durchgefuhrt wird, wobei ein Takt zum Zugreifen auf das eingebettete RAM verwendet wird, der eine Frequenz aufweist...

...blocks of an integrated system (ECC-IC) of a read channel of data recorded on DVD-Rom, DVD-Ram and DVD-R for performing Reed-Solomon decoding including off-line heroic correction, said integrated system including an input buffer (INPUT BUFFER), an interface with a microcontroller bus (muP IF), a Reed-Solomon decoder (REED-SOLOMON DECODER), an embedded RAM (DRAM) accessed through a 17-bit bus, a descrambling and EDC control block (DESCRAMBLING & EDC) for DVD modes of operation, a data output interface (OUTPUT INTERFACE) and a timing control block (TIMING CONTROL), characterized in that the decoding of the input data acquired through said input buffer (INPUT BUFFER) is performed at a rate of up to four-times the reference bit rate of DVD formatted data using a clock for accessing said embedded RAM having a frequency half that...

...connexion, le systeme integre comprenant un tampon d'entree (INPUT BUFFER), une interface avec un bus de microcontroleur (muP IF), un decodeur Reed-Solomon (REED-SOLOMON DECODER), une RAM integree (DRAM) a laquelle on accede par un bus a 17 bits, un bloc de commande de desembrouillage et EDC (DESCRAMBLING & EDC) pour des modes de fonctionnement DVD, une interface de sortie de donnees (OUTPUT INTERFACE) et un bloc de commande de synchronisation (TIMING CONTROL), caracterise en ce que le decodage des donnees d'entree acquises par le tampon d'entree (INPUT BUFFER) est realise a une cadence allant jusqu'a quatre fois le debit de bits de reference de donnees formatees DVD en utilisant une horloge ...line heroic correction, the integrated system that including an input buffer, an interface with a microcontroller bus, a Reed-Solomon decoder, an embedded RAM accessed through a 17-bit bus, a descrambling and EDC control block for DVD modes of operation, a data output interface and a timing control block, wherein the decoding of input data acquired through the input buffer is performed at a rate of up to four-times a reference bit rate of DVD formatted data using a clock for accessing the embedded RAM having a frequency which is half that of the clock that is used in the Reed-Solomon decoder, while reducing the number of accesses to the embedded RAM needed to perform the decoding, the method comprising the steps of: a) organizing DVD mode input data in two blocks or rows of 182 bytes each; b) storing each block or row in 12 pages of distinct banksBasic Derwent Week: 199952

23/5,K/32 (Item 27 from file: 350)

0007433252 - Drawing available
WPI ACC NO: 1996-041842/ 199605
XRPX Acc No: N1996-035087
Compact disk drive controller - has interface which connects host interface and DSP of IDE to receive digital information from compact disk and transmit digital information to host interface
Patent Assignee: CASE M (CASE-I); OAK TECHNOLOGY INC (OAKT-N); VERINSKY P (VERI-I); ZORAN CORP (ZORA-N)
Inventor: CASE M; VERINSKY P; VERINSKY P
Patent Family (14 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 689207	A1	19951227	EP 1995201658	A	19950619	199605	B
US 5581715	A	19961203	US 1994264361	A	19940622	199703	E
US 20020032808	A1	20020314	US 1994264361	A	19940622	200222	E
			US 1996673327	A	19960628		
US 20020116552	A2	20020822	US 1994264361	A	19940622	200258	E
			US 1996673327	A	19960628		
US 20030037230	A1	20030220	US 1994264361	A	19940622	200316	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		

US 6546440	B1	20030408	US 1994264361	A	19940622	200327	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
US 6584527	B2	20030624	US 1994264361	A	19940622	200343	E
			US 1996673327	A	19960628		
US 6721828	B2	20040413	US 1994264361	A	19940622	200425	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
US 20040158658	A1	20040812	US 1994264361	A	19940622	200454	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
US 6968404	B2	20051122	US 1994264361	A	19940622	200577	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
US 20060036787	A1	20060216	US 1994264361	A	19940622	200614	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
			US 2005254610	A	20051019		
US 20060101161	A1	20060511	US 1994264361	A	19940622	200633	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
			US 2005254610	A	20051019		
			US 2005269461	A	20051107		
US 7124216	B2	20061017	US 1994264361	A	19940622	200668	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
			US 2005254610	A	20051019		
US 7124217	B2	20061017	US 1994264361	A	19940622	200668	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
			US 2005254610	A	20051019		
			US 2005269461	A	20051107		

Priority Applications (no., kind, date): US 1994264361 A 19940622; US 1996673327 A 19960628; US 1999442866 A 19991118; US 200282990 A 20020225; US 2004773880 A 20040206; US 2005254610 A 20051019; US 2005269461 A 20051107

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 689207	A1	EN	45	87	
Regional Designated States, Original: DE FR GB IT					
US 5581715	A	EN	47	83	
US 20020032808 A1 1994264361		EN			Continuation of application US
					Continuation of patent US 5581715
US 20020116552 A2 1994264361		EN			Continuation of application US
					Continuation of patent US 5581715
US 20030037230 A1 1994264361		EN			Continuation of application US
1996673327					Continuation of application US
1999442866					Continuation of application US
					Continuation of patent US 5581715
US 6546440 B1 1994264361		EN			Continuation of application US
					Continuation of application US

1996673327			
			Continuation of patent US 5581715
US 6584527	B2	EN	Continuation of application US
1994264361			
			Continuation of patent US 5581715
US 6721828	B2	EN	Continuation of application US
1994264361			
			Continuation of application US
1996673327			
			Continuation of application US
1999442866			
			Continuation of patent US 5581715
			Continuation of patent US 6546440
			Continuation of patent US 6584527
US 20040158658	A1	EN	Continuation of application US
1994264361			
			Continuation of application US
1996673327			
			Continuation of application US
1999442866			
			Continuation of application US
200282990			
			Continuation of patent US 5581715
			Continuation of patent US 6546440
			Continuation of patent US 6584527
			Continuation of patent US 6721828
US 6968404	B2	EN	Continuation of application US
1994264361			
			Continuation of application US
1996673327			
			Continuation of application US
1999442866			
			Continuation of application US
200282990			
			Continuation of patent US 5581715
			Continuation of patent US 6546440
			Continuation of patent US 6584527
			Continuation of patent US 6721828
US 20060036787	A1	EN	Continuation of application US
1994264361			
			Continuation of application US
1996673327			
			Continuation of application US
1999442866			
			Continuation of application US
200282990			
			Continuation of application US
2004773880			
			Continuation of patent US 5581715
			Continuation of patent US 6546440
			Continuation of patent US 6584527
			Continuation of patent US 6721828
			Continuation of patent US 6968404
US 20060101161	A1	EN	Continuation of application US
1994264361			
			Continuation of application US
1996673327			
			Continuation of application US
1999442866			
			Continuation of application US
200282990			
			Continuation of application US
2004773880			
			Continuation of application US
2005254610			
			Continuation of patent US 5581715
			Continuation of patent US 6546440
			Continuation of patent US 6584527
			Continuation of patent US 6721828
			Continuation of patent US 6968404
US 7124216	B2	EN	Continuation of application US
1994264361			

				Continuation of application US 1996673327
				Continuation of application US 1999442866
				Continuation of application US 200282990
				Continuation of application US 2004773880
				Continuation of patent US 5581715
				Continuation of patent US 6546440
				Continuation of patent US 6584527
				Continuation of patent US 6721828
				Continuation of patent US 6968404
US 7124217	B2	EN		Continuation of application US 1994264361
				Continuation of application US 1996673327
				Continuation of application US 1999442866
				Continuation of application US 200282990
				Continuation of application US 2004773880
				Continuation of application US 2005254610
				Continuation of patent US 5581715
				Continuation of patent US 6546440
				Continuation of patent US 6584527
				Continuation of patent US 6721828
				Continuation of patent US 6968404

Alerting Abstract EP A1

The controller comprises a host interface. The interface connects the host computer via an IDE data **bus** to the compact **disk** drive controller to receive data addresses and commands from the host computer. It also transmits digital information to the host computer.

A path communicates the data addresses and commands from the host interface to the microcontroller of the drive electronics. A DSP (28) interface connects the host interface and the digital signal processor of the drive electronics to receive digital information from the compact disk and transmit digital information to the host interface.

ADVANTAGE - Overcomes problems associated with existing CD drive controllers which prohibits employment of most cost efficient or highest performance combination of devices.

Title Terms/Index Terms/Additional Words: COMPACT; DISC; DRIVE; CONTROL; INTERFACE; CONNECT; HOST; RECEIVE; DIGITAL; INFORMATION; TRANSMIT; DIGITAL; SIGNAL; PROCESSOR; INTEGRATED; DRIVE; ELECTRONICS

Class Codes

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G06F-0013/12	A	I	F B	20060101
G06F-0003/00	A	I	F B	20060101
G06F-0003/06	A	I	R	20060101
G11B-0027/10	A	I	R	20060101
G06F-0013/12	C	I	F B	20060101
G06F-0013/12	C	I	L B	20060101
G06F-0003/00	C	I	L B	20060101
G06F-0003/06	C	I	R	20061220
G11B-0027/10	C	I	R	20060101

US Classification, Issued: 710005000, 713001000, 710062000, 710062000, 710005000, 395309000, 395185010, 395822000, 395849000, 395872000, 364130000, 364232200, 364236200, 364237900, 364DIG100, 364238300, 364265000, 371030000, 710062000, 710002000, 710129000, 710129000, 710002000, 710029000, 710036000, 710052000, 711118000, 712233000, 712245000, 714048000, 714746000, 714758000, 710062000, 710002000, 710129000, 710062000, 710002000, 710129000

File Segment: EPI;
DWPI Class: T01; T03
Manual Codes (EPI/S-X): T01-C01; T03-B08; T03-N01; T03-P01A

Alerting Abstract ...controller comprises a host interface. The interface connects the host computer via an IDE data **bus** to the compact **disk** drive controller to receive data addresses and commands from the host computer. It also transmits...

Original Publication Data by Authority

Original Abstracts:
A compact **disk** drive controller to **control** the access of information from an optical compact **disk** (**CD**) **digital** data **storage** device by a host computer using an integrated drive electronics (IDE) data **bus** or an industry **standard** architecture (ISA) data **bus** is disclosed. A **digital** signal processor (DSP) interface to the drive electronics of the **CD** drive, a dynamic **random** access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and...

...A compact **disk** drive controller to control the access of information **from** an optical compact **disk** (**CD**) digital data storage device by a host **computer** using an integrated drive electronics (IDE) data **bus** or an industry standard architecture (ISA) data **bus** is disclosed. A digital signal processor (DSP) interface **to** the drive electronics of the **CD** drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and correction (EDC) device employing cyclical...
...A compact **disk** drive controller to control the access of information from an optical compact **disk** (**CD**) digital data storage device by a host computer using an integrated drive **electronics** (**IDE**) data **bus** or an industry standard architecture (ISA) data **bus** is disclosed. A digital signal **processor** (DSP) interface to the drive electronics of **the** **CD** drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) **data** corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC...

...A compact **disk** drive controller to control the access of information from an optical compact **disk** (**CD**) digital data storage device **by** a host computer using an integrated drive electronics (IDE) data **bus** or **an** **industry** standard architecture (ISA) data **bus** is disclosed. A digital signal processor (DSP) interface to the **drive** electronics of the **CD** drive, a dynamic **random** access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection **and** correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC), and a host computer interface...

...A compact **disk** drive controller to control the access of information from an optical compact **disk** (**CD**) digital data storage device by a host computer using **an** integrated drive electronics (IDE) data **bus** or an industry standard architecture (ISA) **data** **bus** is disclosed. A digital signal processor (DSP) interface to the drive electronics of the **CD** **drive** , a dynamic random access memory (DRAM) controller, **an** error correction code (ECC) data corrector, an error detection and correction (EDC) device employing **cyclical** redundancy checking techniques (EDC/CRC), and a host computer interface are described...

...A compact disk drive controller to control the access of information from an optical compact **disk** (**CD**) digital data storage device by a host computer using an integrated drive electronics (IDE) **data** **bus** or an industry standard architecture (ISA) data **bus** is disclosed. A **digital** **signal** processor (DSP) interface to the drive electronics of the **CD** drive, a dynamic random access **memory** (DRAM) controller, an error correction code (ECC) **data** corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/ **CRC**), and a host computer interface are described...

...A compact disk drive controller to control the access of information from an optical compact **disk** (**CD**) digital data storage device by a host computer using an integrated drive electronics (IDE) data **bus** or an industry **standard** architecture (ISA) data **bus** is disclosed. A digital signal processor (DSP) interface **to** **the** drive electronics of the **CD** drive, a dynamic random access memory (DRAM) controller, an error **correction** code (ECC) data corrector, an error detection **and** correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC),

and a host computer interface are described. ...digital data storage device by a host computer using an integrated drive electronics (IDE) data bus or an industry standard architecture (ISA) data bus is disclosed. A digital signal processor (DSP) interface to the drive electronics of the CD drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC), and a host computer interface are described.

...

...A compact disk drive controller to control the access of information from an optical compact disk (CD) digital data storage device by a host computer using an integrated drive electronics (IDE) data bus or an industry standard architecture (ISA) data bus is disclosed. A digital signal processor (DSP) interface to the drive electronics of the CD drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC), and a host computer interface are described.

...

...digital data storage device by a host computer using an integrated drive electronics (IDE) data bus or an industry standard architecture (ISA) data bus is disclosed. A digital signal processor (DSP) interface to the drive electronics of the CD drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC), and a host computer interface are described.

...

...digital data storage device by a host computer using an integrated drive electronics (IDE) data bus or an industry standard architecture (ISA) data bus is disclosed. A digital signal processor (DSP) interface to the drive electronics of the CD drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC), and a host computer interface are described.

Claims:

...random access memory and a system controller, wherein said host computer communicates with said compact disk drive controller via an IDE data bus and receives digital information from the compact disk via said IDE data bus. said compact disk drive controller comprising:</br> a host interface connecting said host computer via said IDE data bus with said compact disk drive controller, to receive data addresses and commands from said host computer and to transmit digital information to said...

...electronics including a digital signal processor, a microcontroller, a random access memory and a system controller, wherein said host computer communicates with said compact disk drive controller via an IDE data bus and receives digital information from the compact disk via said IDE data bus, said compact disk drive controller comprising:a host interface connecting said host computer via said IDE data bus with said compact disk drive controller, to receive data addresses and commands from said host computer and to transmit digital information to said host computer, a path for communicating data addresses and commands from said host interface to the microcontroller...
...said digital signal processor of said drive electronics to receive digital information from said compact disk and to transmit said digital information to said host interface...

...carry out initial signal transitions on DASP, PDIAG, and HIRQ lines of said IDE/ATA bus in response to soft reset and execute drive diagnostic command events, and circuitry operable to ...said optical drive controller operable to allow a microcontroller, which controls reading of information from optical media, to read from said multi-byte command buffer, to cause said BSY bit to be altered, to read said DRV bit, and to cause

certain transitions of signals on said DASP, PDIAG, and HIRQ lines of said IDE/ATA **bus** .

...

...What is claimed is:1. An...

...said host interface operable to be directly connected to a host computer via an IDE/ **ATA** **bus** to communicate addresses, commands, and data through ATA command block register addresses, said host interface...

...bus.
...

...What is claimed is: A compact **disk** drive controller to control the communication of data between a compact **disk** in a compact **disk** drive and a host computer via an IDE/ATA data **bus** , said data **bus** for receiving and transmitting data between said controller and said **host** computer, said **disk** drive having drive electronics that include a digital signal **processor** and a microcontroller, said controller comprising:</br>a digital signal processor interface for receiving data from said digital signal processor, said digital signal processor interface descrambling and assembling **data** received from said digital signal processor;</br>memory means for temporarily storing data, said memory means temporarily storing said assembled data;</br>data error detection and correction means for correcting said assembled **data** , said detection and correction means including error correction circuitry for performing error correction on said assembled data and a cyclic redundancy **checker** for detecting **errors** in said **assembled** **data** **after** **correction** of said **data** by said correction circuitry for **providing** corrected **data** ; and</br>host interface means for connecting said **host** computer to said controller, said interface means adapted to receive data **addresses** and commands from said host computer and transmit **corrected** data to said **host** computer **to** insure an uninterrupted flow of data from said **controller** to said host computer...

...carry out initial signal transitions on DASP, PDIAG, and HIRQ lines of said IDE/ATA **bus** in response to soft reset and execute drive diagnostic command events, andcircuitry operable to...

...said optical drive controller operable to allow a microcontroller, which controls reading of information from **optical** **media** , to read from said multi-byte command buffer, to cause said BSY bit to be...

...certain transitions of signals on said DASP, PDIAG, and HIRQ lines of said IDE/ATA **bus** .

...

...medium in an optical drive device and a host computer via an IDE/ATA data **bus,** said data **bus** for receiving and transmitting data between said controller and said host computer, said **optical** **drive** device having drive electronics, said optical drive controller comprising:a storage medium interface for receiving...

...correction circuitry, said detection and correction circuitry including:error correction circuitry for performing error correction on data received from said interface and generating corrected data, anderror detection circuitry for detecting...
Basic Derwent Week: 199605
?